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POWERLINE

EGSA

The Voice of the On-Site Power Generating Industry

EGSA Conference
Fall Conference Recap

EGSA News
- *EGSA Members Recognized for Service*
- *Final Power School to be held in conjunction with POWER-GEN*

A Perfect Labor Storm
How to Respond When the Sky is Falling

On-Site Power Economic Outlook
Dr. Michael Evans Shares His Insights

POWER-GEN
The Industry's Biggest Show Returns to Orlando

T H E **E N E R C O N** C A P A B I L I T Y

INTERNATIONAL AIRPORT

STANDBY POWER & PARALLELING WITH UTILITY

ENGINES: Four engines rated at 2,000 kW / 2,500 kVA • Diesel fueled, skid base, double walled 1,000 gallon tank

GENERATORS: 3 phase, 60 Hz
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CONTROLS & SWITCHGEAR: Enercon Evolution Control System with touch screen controls

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Conferences

EGSA 2009 Annual Spring Convention

March 15-17, 2009; San Antonio, TX

The Association's Annual Convention of Members. Speakers will cover business and technical aspects of On-Site Power Generation and current industry trends. For additional information, visit *www.EGSA.org* or call (561) 750-5575.

EGSA 2009 Fall Technical & Marketing Conference

September 13-15, 2009; Colorado Springs, CO

Speakers will cover business and technical aspects of On-Site Power Generation and current industry trends. For information, visit *www.EGSA.org* or call (561) 750-5575.

EGSA 2010 Annual Spring Convention

March 14-16, 2010, St. Petersburg, FL

The Association's Annual Convention of Members. Speakers will cover business and technical aspects of On-Site Power Generation and current industry trends. For additional information, visit *www.EGSA.org* or call (561) 750-5575.

Look for more industry events in our up-to-date calendar on the web at *www.EGSA.org*. *EGSA Members*: To list your meetings here, fax your information to (561) 395-8557.

Schools

EGSA On-Site Power Generation Basic School

Orlando, FL .... Dec. 3-5, 2008*
Charleston, SC .... February 3-5, 2009
Hartford, CT .... June 16-18, 2009
Portland, OR .... August 4-6, 2009
Memphis, TN .... October 13-15, 2009

EGSA On-Site Power Generation Advanced Schools

Indianapolis, IN .... April 20-23, 2009
Las Vegas, NV* .... December 7-10, 2009

**To be held concurrently with POWER-GEN International*

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Industry Trade Shows

POWER-GEN International 2008

December 2-4, 2008; Orlando, FL

The world's biggest show for power generation, featuring the EGSA On-Site Power Pavilion. For exhibit information, contact EGSA at (561) 750-5575, ext. 205 or e-mail Jalane Kellough at *J.Kellough@EGSA.org*.

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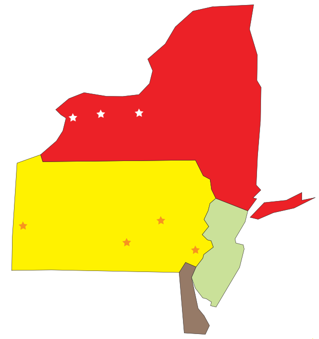

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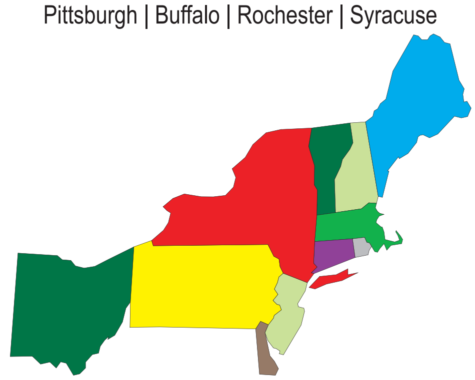

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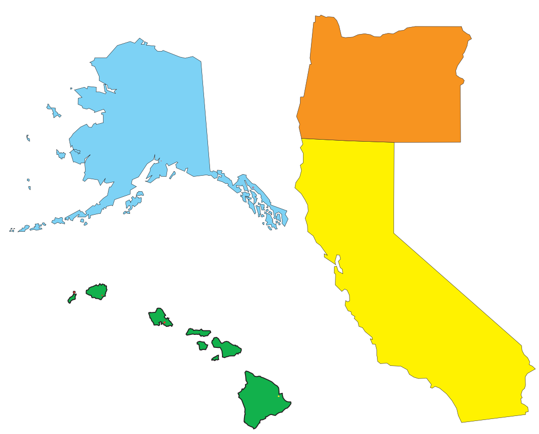

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Warner Bauer
2008 EGSA President

Some Final Thoughts as EGSA President

The past year has been one of the most rewarding experiences of my life. It has been both my honor and pleasure to serve as EGSA President for the past year.

It has been, to all accounts, an eventful year not only for EGSA but for the entire industry. The economy has been incredibly volatile this year. Between the mortgage crisis and the credit crunch—and the resulting stock market nose dive—businesses everywhere have been under increasing pressure to succeed.

Happily, EGSA has been prospering in the face of adversity this year. Our membership has increased (from 602 at the end of 2007 to 631 at the end of October, 2008); our EGSA On-Site Power Pavilion is continuing to thrive and claim its place as the largest Pavilion within the POWER-GEN International Show; and participation in our new two-tiered On-Site Power Schools is unmatched. In fact, every School held thus far in 2008 has been sold out. Our recent Fall Conference was equally a success. I'm proud to say that we drew our speakers from some of the most well-known and important firms within the On-Site Power Industry.

Our industry also is thriving despite the economic crisis. I just received the October issue of *Diesel & Gas Turbine Worldwide* in which they published the results of their 32nd Power Generation Survey. They indicate that the orders for piston engines above 1.0 MW increased by about 7.3% and piston engines in the range of 500 to 1000KW increased by over 12%.

Yet, even though our industry's health appears to remain good, I am sure that you share my concerns for the future in light of the continuing economic crisis. Therefore, I'd like to encourage you to read Dr. Mike Evans' article on the economy in this issue of *Powerline* magazine.

We've been privileged to have Dr. Evans speak at several EGSA conferences, most recently the Fall Technical & Marketing Conference in Atlanta. According to Dr. Evans, the financial panic has ended, but has left in its wake an economic downturn that will last until early next year. After that, he adds, the recovery will be extremely sluggish—similar to what occurred in 1991-92 and 2002. Dr. Evans believes that real growth over the next several years is likely to average about 2½%, less than the 3% gain during the previous recovery and far below the 4%+ gains that used to occur in previous recoveries.

So, in other words, the future economy should see modest gains over the next few years. Once the damage done by negative home equity and irrational financial sector expansion has been repaired, we could see greater stability and greater long term gains.

The future of our industry and that of our Association also look good. The EGSA Board of Directors is committed to continually develop member programs, benefits and services that support you and equip you to compete more effectively and efficiently in today's marketplace. As a result, the EGSA Board has recently appointed a Strategic Planning Committee to help guide the Association into the future. You'll be hearing more about these efforts in 2009.

In closing, I'd like to thank the 2008 EGSA Board of Directors for their service and support over the past year. Thanks to their dedication, EGSA will continue to excel, grow and thrive well into the next decade. ■

George Rowley
EGSA Director
of Education

Call for Authors and Reviewers is Partial Success

Over 50 people responded to the recent Call for Authors and Reviewers for the 5th Edition of On-Site Power Generation: A Reference Book. We extend our hearty thanks to all who stepped forward by volunteering to contribute as an author, a co-author, reviewer, or who referred others to us.

That said, we need authors for selected chapters and more reviewers (we hope to have at least three reviewers for each chapter). If you are interested in contributing to the newest edition of the "bible of the On-site Power Industry," or if you know of someone within or outside of your organization that might be able to contribute, please contact George Rowley to discuss where our needs are – it may be that you will be a key factor in helping to meet our goal for this edition to be significantly improved over previous editions. I can be reached by e-mail at *G.Rowley@EGSA.org* or by phone at 561-237-5557.

Technician Certification Update

As of the end of September, 234 technicians had taken and passed the EGSA Electrical Generator Systems Technician Certification test. This includes 13 techs in Canada and four in Trinidad. With the 105 techs that have certified so far this year—and in spite of a bit of a Summer lull—we still have three months to go but we are running well ahead of last year's pace (97 techs took and passed the test in 2007).

While techs will find the actual test challenging, applying to take the test is easy and Ferris State University will arrange for a testing site within reasonable distance of the tech's home or workplace. An application/order form can be downloaded from the Certification Section on the EGSA website (*www.EGSA.org*), but we urge techs to buy and use a Study Guide before applying to take the test. Study Guides can be ordered using the same form as you will use to order the test. Both the Study Guide and the test must be ordered through Ferris State University.

A total of 531 techs have purchased a Study Guide so it is clear that many techs are preparing for, but have not yet taken, the test. And we are very pleased that 754 logo items have been sold. The uniform patches, baseball caps, and adhesive logo decals enable each tech to proudly display graphic evidence of their achievement and "advertise" their elite status to customers and clients.

In keeping with the Certification Committee's intent to rally participation in this important program among Distributors and Dealers and its plan to promote the Technician Certification Program among end-users, a postcard was sent to almost 800 members in June. The theme of the postcard was:

"There are: Those that make it happen; those that watch it happen; and those that wondered what happened."

Will your company be one of those who "make it happen?" Or will you be among those that watch it happen or, worse, wonder what happened?

Questions or comments about EGSA Education programs should be directed to George Rowley, EGSA Director of Education (*G.Rowley@EGSA.org* or 561-237-5557). ■

Stand out from the Competition with the EGSA Certified Electrical Generator Systems Technician Logo

You can now wear this patch! It is used only by EGSA Certified Technicians. It sends a clear message that you and your employer are special. It shows you have proven your skill and knowledge by passing a rigorous test and that your employer is committed to excellence and high standards. If you've earned the title "EGSA Certified Electrical Generator Systems Technician"—use this logo with pride!

EGSA Member Item # (Specify)	Non-Member Item # (Specify)	Quantity	Logo Item Description	EGSA Member Price	Non-Member Price	Item Total
❏ FSU 093	❏ FSU 094		**Logo Uniform Patch**—These highly detailed uniform patches contain over 15,000 stitches to highlight our copyrighted line drawing genset logo and proclaims, in gold lettering, that the wearer is an "EGSA Certified Electrical Generator Systems Technician."	❏ $3.50 *(Purchase limited to 5 per technician)*	❏ $6.50	
❏ FSU 120	❏ FSU 121		**Baseball Cap**—These distinctive EGSA blue caps with white brim stripe, button, and vents feature the EGSA Certified Electrical Generator Systems Technician logo in front. These one-size-fits all caps are made of durable high-quality cotton and feature a flex-strap to adjust the size.	❏ $21.25 *(Purchase limited to 5 per technician)*	❏ $26.25	
❏ FSU 122	❏ FSU 123		**Self-Adhesive Decal** (4"x6")—These heavy-duty adhesive-backed vinyl decals are made to hold up to exposure to the elements. To help resist fading and weathering, the images are printed with UV-resistant ink and we have applied an extra coating to further protect the image from fading and abrasion.	❏ $10.75 *(Purchase limited to 5 per technician)*	❏ $15.75	
❏ FSU 124	❏ FSU 125		**Self-Adhesive Decal** (8"x10")	❏ $21 *(Purchase limited to 5 per technician)*	❏ $25	

Only EGSA Certified Technicians are authorized to use Certified Technician Logo Items. Please enter the technician's certificate number so that we can process the order

EGSA Certification Number

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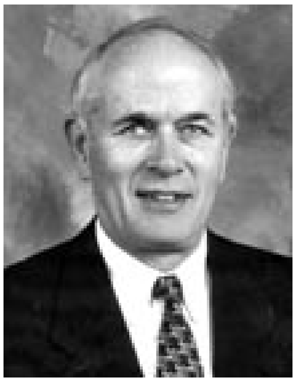

Herb Whittall
EGSA Technical Advisor

NFPA Meets in Chicago

During the EGSA Fall Conference in Atlanta, the Codes and Standards Surveillance Committee reviewed the pending EGSA Standard concerning compliance with seismic and wind certification under the International Building Code (IBC). The matter was tabled until the State of California finalizes its Draft Code Application Notice. Elsewhere, most of the standards news comes from NECA, UL and NFPA.

The National Electrical Contractors Association (NECA), with whom EGSA published EGSA Standard 107, is preparing three more standards for ANSI approval. They are NECA 407: Standard for Installing and Maintaining Panelboards; NECA 408: Standard for Installing and Maintaining Busways; and NECA 409: Standard for Installing and Maintaining Dry-Type Transformers. The last is for transformers for 600 volts and below. I am one of those participating in the canvassing under the interest category of "Producer as a Trade Association."

UL Standard for safety for Power Outlets, UL 231 has been revised. The revisions are not great. Sections 4.4 and 4.6 have new wording and Paragraph 35.78 has been added to clarify tool utilization for the installation of power outlet fittings. These revisions were resolved and UL Standard 231 was republished and dated August 6, 2008.

The NFPA Report on Comments meeting for NFPA 110 Standard for Emergency and Standby Power Systems and NFPA 111 Standard on Stored Electrical Energy Emergency and Standby Power Systems was held in Chicago at The Joint Commission on September 24 and 25. There were only three items concerning NFPA 110. One was to add a reference to NFPA 70B Recommended Practice for Electrical Equipment Maintenance in section 8.1.1 which was rejected since the reference is already in the Annex. The other was a committee proposal that grew out of NFPA 111. In it, section 3.3.9.1 Definition for an Automatic Transfer Switch was made identical to the definition in NFPA 111 (read on). The third item revised the definition in 3.3.9.3 Non-Automatic Transfer switch to read "A device, operated manually by a physical action, or electrically by either a local or remote control for transferring a common load between a normal and alternate supply."

Most of the discussion concerned NFPA 111. One comment was brought up in that per NFPA 110 "Stored Emergency Power Supply System" (SEPSS) cannot be powered by a standby generator. Only an "Uninterruptable Power Supply" (UPS) is powered by a standby generator. A new drawing was added to Annex B showing the various systems.

Annex 3.3.5.1 had the following text added to broaden what is considered a SEPSS. "Chemically derived stored energy supplies include, but is not limited to batteries, fuel cells etc."

The section 3.3.9.1 Automatic Transfer Switch text was revised to read: "Self-acting equipment for transferring the connected load conductor connections from one power source to another power source."

NFPA 111 section 5.3.3 Remote Annunciation will read: The following remote monitoring shall be provided as a minimum:

(1) Level 1 SEPSS – local, facility remote and network remote annunciation.
(2) Level 2 SEPSS – local annunciation.

And Section 5.3.3.1 was added reading: "Local" annunciation is located on the equipment itself or within the same equipment room. "Facility Remote" annunciation is located on site but is outside the room where the equipment is located. "Network Remote" annunciation is off-site.

In Annex A and Annex B the following IEEE standards were referenced: IEEE Std 450: Vented Lead Acid Batteries; IEEE Std 1106: Nickel-Cadmium Batteries and IEEE: Std 1188 Valve-Regulated Lead-Acid Batteries.

NFPA 99 changed Emergency Power Systems to Essential Power Systems so the emergency system does not have to be sized to the whole connected load.

NFPA is putting on training seminars for NFPA 70E Electrical Safety in the Workplace in Milwaukee, December 4-5; Sparks NV, December 11-12; and Orlando December 18-19. To register or find out about other dates call 1-888-738-5828 or log onto *nfpatraining.org*. ■

2009 Media Kit for EGSA's *Powerline* Magazine Available Online

The Electrical Generating Systems Association (EGSA) has announced that the 2009 Media Kit for its bi-monthly publication, Powerline magazine, is available for download at *www.EGSA.org*. The Electrical Generating Systems Association (EGSA) publishes *Powerline* as a service to its members and the industry. *Powerline* is the only magazine that thoroughly and exclusively covers On-Site Power electrical generation and its related industries throughout the globe. No other publication can match Powerline for its focus on On-Site Power with a circulation that includes Manufacturers, Distributor/Dealers, Manufacturer's Representatives, Consulting and Specifying Engineers, Service Firms, End-Users and others throughout the U.S. and around the world who make, sell, distribute, and use generators, engines, switchgear, controls, voltage regulators, governors, and more.

Each issue of *Powerline* includes important business articles covering an array of diverse industry issues, such as international markets, contracts, financing, trade agreements, and much more. Technical and "how-to" articles educate readers about new technology trends and commonly misunderstood applications. In addition, regular columns on industry codes and standards, news from Europe, manufacturer's representative issues, industry events and more keep readers informed.

The On-Site Power Generation Industry continues to be one of the most vibrant and active sectors within the nation's energy marketplace. With products ranging from diesel gen-sets to hydrogen fuel cells and applications ranging from emergency back-up to cogeneration, On-Site Power is at the forefront of today's fast-moving marketplace.

For more information, visit EGSA online at *www.EGSA.org* or call 561/750-5575.

EGSA Members Recognized for Service to the Association and the Industry

Three outgoing Directors of the Electrical Generating Systems Association (EGSA) Board were singled out at the recent EGSA Fall Technical & Marketing Conference in Atlanta, GA and recognized for their contributions to the Association.

2008 EGSA President Warner Bauer presented Dave Dahlstrom (Shindaiwa, Inc.), Deb Laurents (Cummins Power Generation) and Randall Nunmaker (Wärtsilä North America, Inc.) with

Continued on page 14

Dave Dahlstrom

Debra Laurents

Randall Nunmaker

plaques in recognition of their three years of service on the EGSA Board of Directors. All three Directors began serving on the Board in January, 2006 and will step down at the end on 2008.

In related news, David Brown (Kohler), Michael Witkowski (Pritchard Brown) and Greg Walters (Kim Hotstart Mfg. Co.) have been elected to the EGSA Board of Directors along with Michael Pope (Süd-Chemie, Inc.) who will serve as EGSA Secretary/Treasurer. All four individuals will begin their terms in January, 2008.

EGSA to Hold Final 2008 Power School Concurrently With POWER-GEN International

The Electrical Generating Systems Association (EGSA) will hold its final Basic On-Site Power Generation School program December 3-5 concurrently with POWER-GEN International in Orlando, FL. EGSA's new Basic and Advanced Schools are designed to better meet the needs and diverse backgrounds of those who attend the schools. The result is a more pertinent training experience in fewer days—that means fewer hotel dollars spent, and fewer days away from the workplace.

EGSA's On-Site Power Generation Schools provide a complete overview of the components of an On-Site Power generation system. The program provides students with a unique opportunity to familiarize themselves with the technical aspects of the On-Site Power Generation Industry.

Basic School—The Basic School is a general, but still technical, overview of On-Site Power Generation equipment. The Basic School is designed for those who are working in non-technical positions (such as Sales or Marketing, Administrative, or Company Management positions) and for those with less than three years experience working in the industry. As a result, we have "lightened up" several modules to make them **more suitable for less experienced or non-technical personnel**.

Advanced School—In comparison to the Basic School, the Advanced School will offer more highly technical and in-depth coverage of the equipment. The Advanced School is designed for those who have attended the EGSA Basic On-Site Power Generation School; those who are employed in Engineering, Project Management, or Service positions; and **for those with over three years experience in the industry**. The Advanced School features "beefed up" modules and covers technical aspects in a more in-depth manner and offers three new modules—"Starting Systems," "Emissions," and "Noise Control."

A 2009 calendar of EGSA On-Site Power Basic and Advanced Schools may be found on page 5 of this issue of *Powerline* magazine. ■

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On-Site Power Professionals Consider "Decisions 2008: The Impact on 2009 and Beyond" at 2008 EGSA Fall Technical & Marketing Conference

The Electrical Generating Systems Association (EGSA) recently held its 2008 Fall Technical & Marketing Conference at the Atlanta Marriott Marquis in downtown Atlanta, GA, September 7-9. Convention speakers and their topics were designed to be of interest to virtually every member of the On-Site Power Industry.

In a Panel Discussion of Gen-set OEM executives, audience members were given insight into what some of the industry's largest manufacturers are currently doing. From left: Panelists Richard Crump, New Business Development Manager for Caterpillar, Jaime De Queiroz, General Manager Commercial Generator Set Business-Americas for Cummins Power Generation, Alan Prosser, Director On-site Energy Sales North America for MTU On-site Energy, Andrew Green, Director Product Improvement Engineering for Dresser Waukesha and Roger George, Strategic Marketing, GE Energy Jenbacher Division.

In his session "Predicting the Outlook for Your Industry", econometrician Dr. Mike Evans, Chairman of Evans, Carroll & Associates, gave his predictions on how the overall U.S. economy should perform over the next two years with an eye on what impact the new White House Administration might have on fiscal, monetary and trade policies. While not currently in a recession, said Evans, the U.S. economy will remain "sluggish" for several years. "Five years ago," added Evans, "I told this group that real growth would average about 3% over the next four years. In fact, it turned out to be 3.0%. This time, growth over the next four years will be less than 3%. Or, to put it another way, we didn't really have a recession, so we won't really have a recovery."

Evans went on to warn attendees that the stock market "will remain weak." However, he noted, "the bear market will retard growth but not enough to cause a recession. In general, every 10% drop in stock prices relative to trend growth reduces real growth by ½%. So, even a 30% drop (relative to trend) reduces growth by 1½%."

In his presentation "Workforce Trends That Will Change the Way You Do Business", Ira Wolfe, President of Success Performance Solutions, described how economic, demographic, political and technology events are converging to create a "Perfect Labor Storm" for employers worldwide. Competition for skilled workers, warned Wolfe, is increasing at a surprising rate. The engineering shortage is spreading across industries, and the lack of civil and construction engineers is threatening infrastructure projects. Areas such as banking, aircraft manufacture, petrochemicals and metals are all competing for the same top graduates, he added.

"We need to train business owners and managers how to compete on a global basis," said Wolfe. "We need to educate our youth and re-educate our adults, and we must create incentives to retain and hire older workers while we recruit and develop young workers."

In "Making the Most of Your EGSA Membership", EGSA veteran members and Past EGSA Presidents Leo LeBlanc of Methane Power and Steve Stoyanac of Silex Innovations gave attendees an overview of the Association's current programs, benefits and services. As Chairman of the EGSA Generator Technician Certification Committee, LeBlanc briefed attendees on the program's continuing success and its plans for the future. "Certification is big business," said LeBlanc. "Certification programs help ensure that personnel have met minimal standards for proficiency and, in the case of our industry, customers are likely to actively seek certified technicians."

In his portion of the presentation, Steve Stoyanac provided attendees with a broad overview of the Association's current program offerings, including its On-Site Power Schools, Conferences and Conventions, publications and the On-Site Power Pavilion at POWER-GEN International. Plus, as Chairman of the On-Site Power Reference Book Subcommittee, Stoyanac updated his audience on the Association's current progress on the eagerly awaited 5th Edition of EGSA's "industry bible" and encouraged attendees to participate by authoring and/or

2008 EGSA President Warner Bauer (seated at left) is joined by Past EGSA Presidents in attendance at the Conference (not pictured: Ron Seftick). From left: Warner Bauer, Steve Stoyanac, Leo LeBlanc, Gary Kidwell, Herb Daugherty, Ray Kacvinsky, and Roman Gawlowski.

reviewing chapters for the new book.

In a Panel Discussion of Gen-set OEM executives, audience members were given insight into what some of the industry's largest manufacturers are currently doing and what changes they expect in the marketplace for the short and long term. Panelists Richard Crump, New Business Development Manager for Caterpillar, Jaime De Queiroz, General Manager Commercial Generator Set Business-Americas for Cummins Power Generation, Alan Prosser, Director On-site Energy Sales North America for MTU On-site Energy, Andrew Green, Director Product Improvement Engineering for Dresser Waukesha and Roger George, Strategic Marketing, GE Energy Jenbacher Division each gave brief presentations on their company's current endeavors and then, collectively, discussed and answered questions from the audience.

EGSA Manufacturers Forum

In addition to the lineup of educational sessions, the conference included EGSA's highly successful Manufacturers Forum. The exhibition setting allows EGSA-member manufacturers, attending Distributor/Dealers and manufacturer representatives to engage in a more formal dialogue. EGSA will hold its 2009 Annual Spring Convention March 15-17 in San Antonio, TX. Registration information will be posted on the EGSA web site at www.EGSA.org when it becomes available. ■

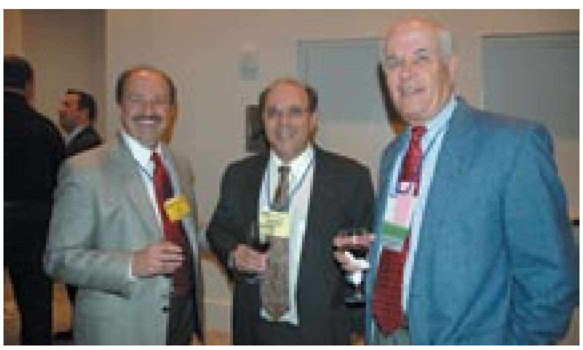
Conference attendees at the EGSA Manufacturers Showcase.

Conference attendees at the Closing Reception.

Allison Young won $100 in the Showcase raffle.

Conference attendees at the Awards Reception & Banquet.

Conference attendees at the Awards Reception.



Conference attendees at the Closing Reception.

Conference attendees at the Awards Reception & Banquet.

Attendees confer at the EGSA Manufacturers Showcase.

Conference attendees at the EGSA Manufacturers Showcase.

On-Site Power Industry Economic Forecast October 2008

By Michael K. Evans, Evans, Carroll & Associates

There may be a somewhat sterile debate about when the recession "really" started, because all of the coincident indicators turned down in November or December of 2007. Through the first half of this year, though, the economy was basically flat. Unmistakable signs of recession did not really surface until the meltdown of the financial sector started in July. Once the bankruptcy of Lehman Bros threw sand in the gears of the normal credit flow mechanism, the downturn intensified. Right now we are in a "traditional" recession in the sense that the initial cutbacks from lack of credit will intensify, and consumers and businesses will be more hesitant to spend for a while even after credit flows are normalized. In terms of the old but not outmoded language on business cycles, the "impulse" was the near-meltdown of the financial sector; we are now in the "propagation" stage, or the rippling of the initial shock throughout the domestic – and world – economy.

In the old days, credit crunches usually occurred because the Fed tightened when inflation appeared to be rising out of control. However, that hasn't been the case for the past 20 years, and yet we have had three (fairly mild) recessions. In all three cases, the problem started when the financial markets became unglued, although there was a long lag between the 1987 crash and the 1990 recession.

Last year I predicted that real GDP would grow 1% this year and there would be no recession. In fact, with real GDP up 0.8% and 2.7% in the first two quarters, and a likely decline of 1% in the third and fourth quarters, the growth in real GDP for the four quarters of the year will probably come in about ½%, which is fairly close in terms of GDP itself. But this is increasingly a meaningless measure. The condition of the economy is better measured by the so-called coincident indexes: employment, sales, income, and production. They are all down substantially. Employment peaked in December, and since then has declined 0.55%, or an annual rate of 0.7%. Industrial production peaked in December, and since then has fallen 2.0% (a 3.0% annual rate). Real disposable income excluding transfer payments has declined 0.7%, or a 1.0% annual rate. Finally, real retail sales peaked in November and are down 3.4% since then. If we average these four indicators, they have fallen at a 2% annual rate so far this year. Normally that indicates a recession.

The Fed and the Treasury are doing everything in its power to restart the mechanism of credit flows, and appears to have been successful. Some consumers and businesses have been turned down for loans even though they have strong credit ratings; that won't last long. Without trying to predict the exact day or week that the gears will become unclogged, we can say with a high degree of assurance that credit flows will be back to normal before the end of this quarter. In fact, that is the easy part of the forecast.

The more pertinent—and difficult—question is how long the recession will continue. Since the end of World War II, all downturns have lasted two to three quarters except in the case where the Fed continued to tighten after the economy was already heading down; that happened in 1974 and again in 1982, both times because inflation remained stubbornly in the double-digit level. Obviously that will not be the case this time. In fact, with commodity prices falling, we will soon hit a brief period of deflation, of which more later.

Put another way, the normal pattern of recession would indicate an upturn early next year in either the first or second quarter, and the burden of proof for those who would predict an even longer decline in economic activity is to show why "this time it's different".

In fact it is not very difficult to identify effects that have not previously occurred, at least not since the 1930s: the unprecedented decline in housing prices, the disappearance of Bear Stearns and the aforementioned bankruptcy of Lehman Bros, the collapse of almost the entire brokerage industry, the inability or unwillingness of short-term credit markets to function, and the rejection of loans for customers of long-term good standing.

Yet as noted above, we think the gridlock in credit markets will soon be terminated. Few will mourn the death of monstrously greedy executives of brokerage firms and hedge funds, and in fact outside of certain enclaves in Manhattan, Greenwich, and the Hamptons, that will have virtually no impact on the overall economy.

The housing market is an entirely different story. Note that we are not talking about the level of housing starts per se, now languishing around 900,000 units. They have been that low many times, including but not limited to the 1991 recession, which was actually quite short and mild. Back then, they didn't really rebound until 1993.

The unique factor is the plunge in housing prices and home equity values, along with the painful unwinding of the "ownership" society that boosted homeownership rates from their long-time flat ratio of 65% to over 69% at the peak. Also, it will take many years to unwind from the fiasco of home equity extraction, also known as using the rising value of your house as a piggy bank.

Over the long run, as discussed in previous forecasts, housing prices rise at about the same rate as personal income (in current dollars). Housing prices were roughly in equilibrium in 2003. Over the past five years, personal income has risen about 6% per year, or slightly over 30% with compounding. At their peak, housing prices in overheated areas doubled. They have since declined about 30%, which means they have risen about 50% (a 30% drop from a high level is more than a 30% rise from a low level). Over the next two

years, then, they have another 10% to 20% to fall before returning to equilibrium, assuming some continuing modest rise in nominal personal income. Note that these are very rough averages and don't apply to all regions equally; they are intended to provide some underlying foundation to the discussion, not a literal prediction of housing prices on your street.

Taking this one step further, it is our prediction that housing prices will return to equilibrium values by the end of next year. That means, in essence, that (a) 2010 will be a normal year for housing, and (b) the economy in 2009 will continue to be depressed by falling housing prices throughout the year, although there will be offsetting positive factors.

Consumers react on impulse and instinct, not so-called rational behavior. Right now they are scared. Even those with money are cutting back. For the next two years, we think consumers will "trade down" by buying fewer luxury goods. That will be a major reason why the upturn, when it does occur, will be unusually sluggish.

The Fed is doing all it can to insure that adequate liquidity remains in the system. We assume it will be successful, and our forecast is based on that assumption. In general, the panic is overstated by the public. On the other hand, if 6 out of 10 now expect a "depression" – although probably few of them could define it – consumers and businesses both will cut back on their purchases for a while, and of course when that happens economic activity will deteriorate further.

As noted above, there are basically two parts to the forecast. First, when will the whiff of panic lift and consumers and businesses will go back to their normal spending patterns in the sense of decisions being related to income and the cost and availability of credit? Second, once normalcy returns, what are the underlying parameters determining the growth rate over the next two years?

Historically, panics is this country do not last very long if they are properly attended to by the authorities. In 1987, the carryover from the 22.8% drop in the Dow on Black Monday lasted only a few weeks, and the market climbed steadily over the next two years, with the S&P 500 up 12%

Figure 1A. Growth in real GDP, Annual Rates

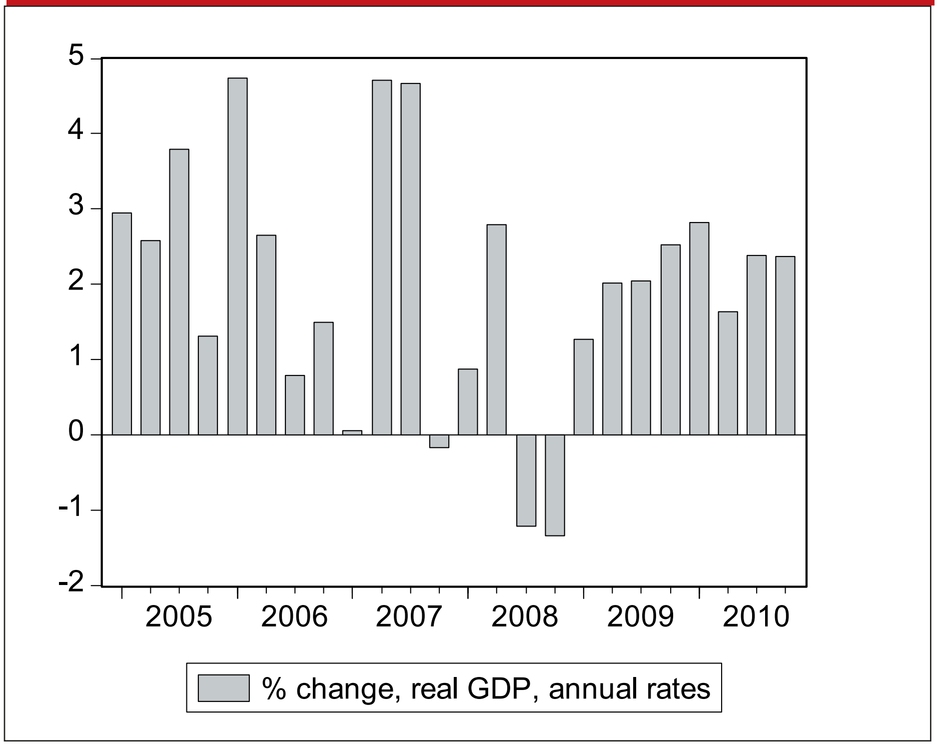


Figure 1B. Growth in Real GDP, Quarterly Rates

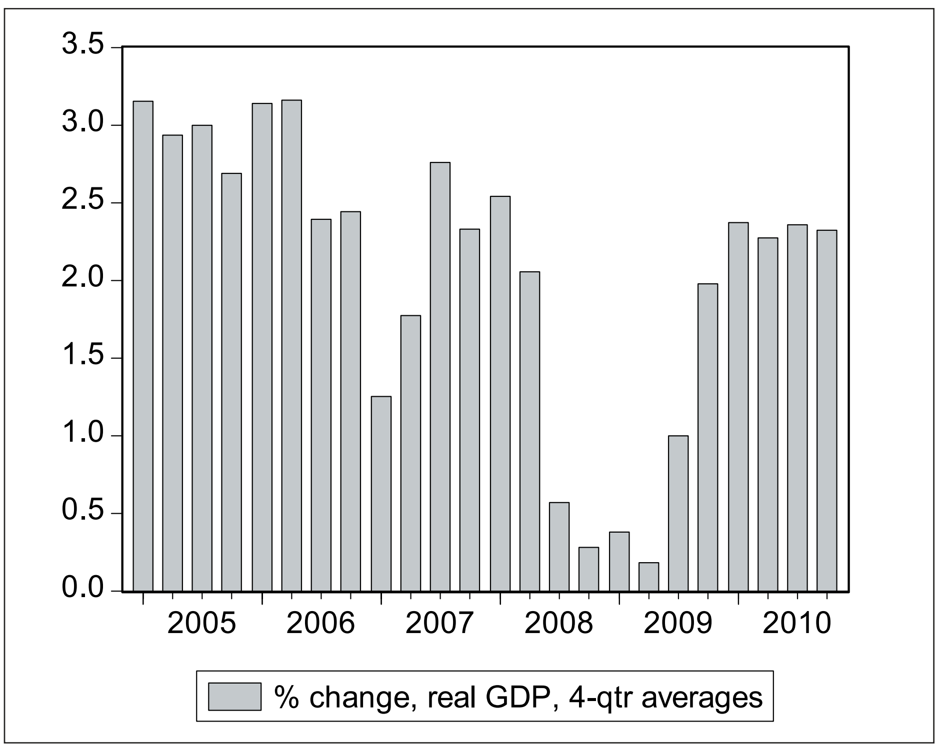
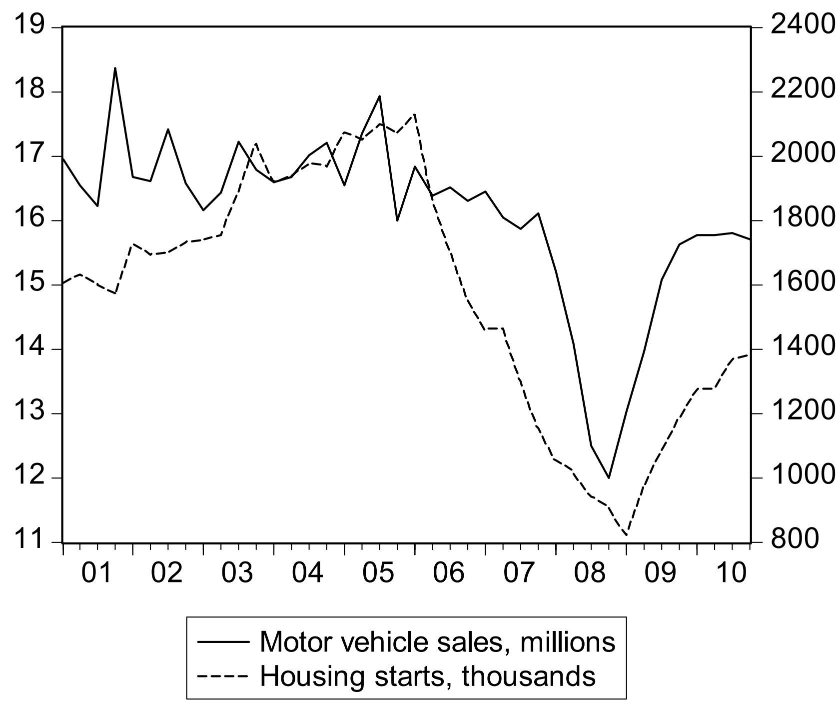


Figure 2. Motor Vehicle Sales and Housing Starts



in 1989. The 1990-91 recession was quite brief and the economy rebounded as soon as the US troops actually invaded Iraq. The collapse of Long-Term Capital Management in 1998 was supposed to be the "end" of these exotic hedge funds, but any lessons from this fiasco were quickly forgotten. After 9/11, it only took six weeks for consumer spending to rebound. We think the current panic will clear by the end of the year, and real GDP will start rising again in early 2009.

The major thrust of the forecast, however, is that economic growth will be quite sluggish over the next two years. To see this, we can compare what happened to the major areas of growth over the past few years with the prediction of what will happen over the next two years. The engines of growth in the past upturn were the following:

1. Housing starts and construction (through 2005)
2. Refinancing, houses as piggybanks (through 2007). That is different from the rise in starts themselves.
3. Defense spending (through 2005)
4. Net exports (past 2 ½ years, still continuing)
5. Nonresidential construction (past two years)

Even with these engines of growth, the economy did not grow very rapidly before from 2003 through 2006, real growth averaged 3.0% per year. Last year it dropped to 2.0%. This year on an annual basis the figure will be about 1.5%, and on a quarterly basis will be about 0.5% as noted above. The difference is the annual basis compares all of 2008 to all of 2007, whereas the quarterly basis measures the growth during the four quarters of 2008, i.e., 2008.4 compared to 2007.4.

In fact the pattern of growth during the first two years of the previous recovery was actually quite different from the last two years even though the growth rate averaged 3% in both periods. In the first two years, the engines of growth were housing and defense spending. In the last two years, they were exports and nonresidential construction. The only factor that remained bullish throughout the period was the boost in consumer spending from home equity extraction, and that came to a crashing thud at the end of last year. Since December, real consumer spending has declined at a 1% rate through September even including the steady increases in medical care spending; without that, the decline is almost 2%.

Earlier this year it seemed likely that the housing market was close to bottoming out. However, that was before the latest contretemps in the credit markets, which set housing back anew. Monthly housing starts data are notoriously erratic, depending on weather phenomena as well as sampling error, but the quarterly patterns over the past four quarters show that starts have dropped from 1.3 to 1.2, 1.1, 1.0 and 0.9 starts (at seasonally adjusted annual rates). The most likely forecast is for another drop to 0.8 million in the fourth quarter, and then a slight rebound in 2009.

In what appears to have been a well-meaning, humanitarian step, the various government agencies have postponed the housing slump indefinitely. They are allowing some people to stay in their homes who have defaulted on their mortgages. But these people, who were actually not economically able to purchase homes in the first place, have certainly not seen their economic fortunes improve in recent months. Eventually, when the grace period expires, they will have to sell their homes at distressed prices, hence keeping a lid on housing prices from rebounding normally.

With this general preamble in mind, we now turn to specific forecasts. After rising 0.8% and 2.7% during the first two quarters of this year, real GDP is expected to decline about 1% in both the third and fourth quarters. It is then expected to rise 1% in 2009.1 and 2% for the rest of the year. In 2010, it is then projected to rise about 2 ½%, as shown in Figure 1A. Figure 1B shows the growth in real GDP for four-quarter averages instead of by quarter.

These graphs might make it seem as if there is little or no difference in the overall growth rates for 2009 and 2010. However, the dynamics are somewhat different. To understand this, look at the results shown in Figure 2.

Right now, sales of motor vehicles (excluding heavy trucks) are limping along at about a 12 million annual rate, down from about 16 million in 2006 and 2007. There are several reasons for this unusually sharp decline. First, although oil prices have fallen sharply in the past month, they are still distorting car and truck sales. Trade-in values on SUVs are way below expected values, which has the net effect of raising the price of a new vehicle, and hardly anyone wants to buy a gas-guzzler these days in spite of the recent 40% plunge in oil prices. Second, many creditworthy consumers are being offered harsher credit terms or no credit at all. Third, even buyers who still have plenty of cash are unwilling to purchase a new car now because of

Figure 3. Personal Saving Rate using Measured Income (BEA)

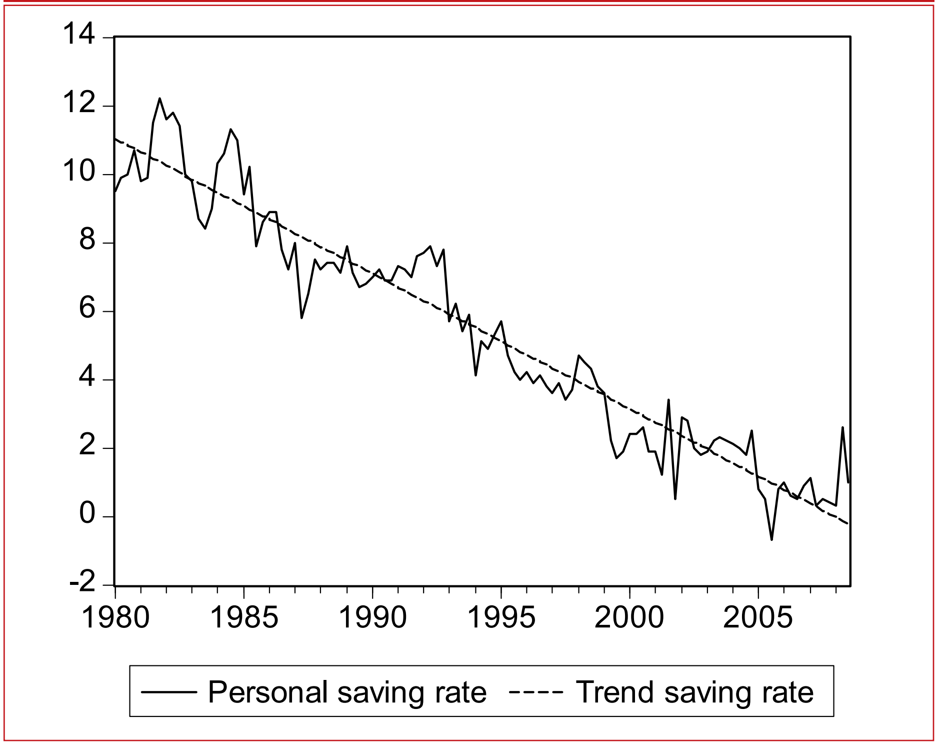
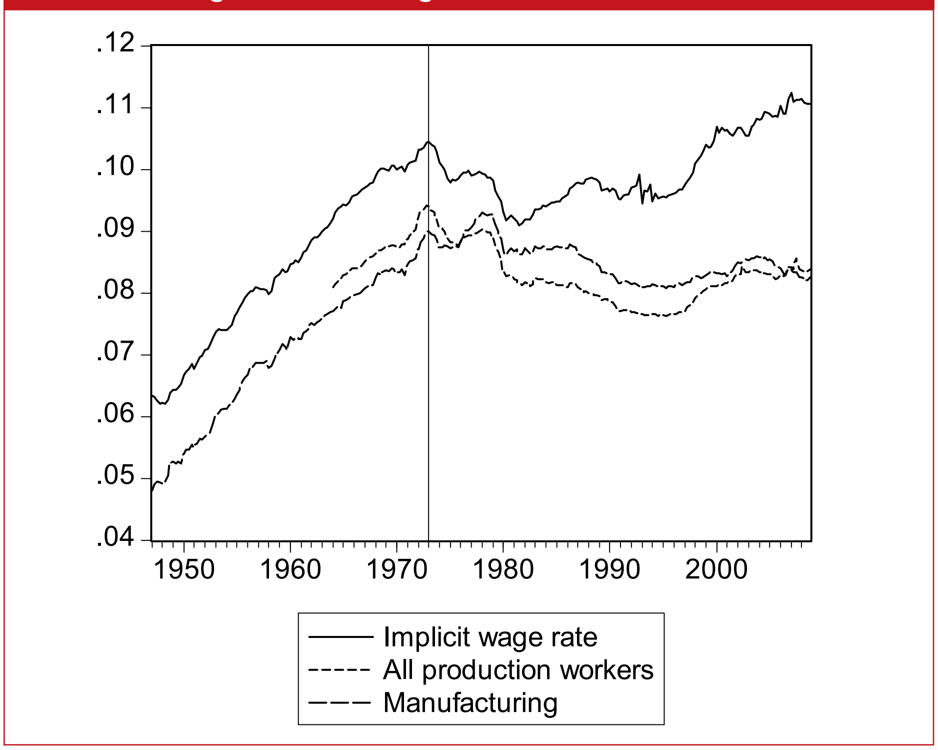


Figure 4. Real Wage Rate, Various Measures



the overall economic uncertainty.

By next quarter, motor vehicle sales will start to return to normal. The industry will have a better balance of fuel-efficient/gas guzzler vehicles in the showroom. As already noted, credit flows will return to normal. And the cloud of pessimism will have lifted somewhat. As a result, motor vehicle sales will gradually edge back up to the 15-16 million range by the end of next year, for a total of slightly more than 14 million for the year.

Housing starts are expected to trough at about 800,000 next quarter and then rebound to about 1.2 million by the end of next year, averaging 1 million for the year. Of course, this is still less than half of the peak values reached in the halcyon year of 2005.

We next turn to consumption. It has always been the case, in good times and bad, that the growth in consumption is equal to the growth in disposable income plus or minus the change in saving. That change can be tied to several factors, including (a) borrowing more, (b) saving less, (c) more capital gains income, or (d) attitudinal factors affecting saving.

For the past 25 years, the personal saving rate, based on measured income excluding capital gains or losses, has been steady declining, falling about ½% per year, as shown in Figure 3. Over such an extended period of time, we can safely rule out short-term fluctuations in attitudes, although they might temporarily diminish consumption here for a quarter or two. Maybe a few consumers used up some excess saving in the 1980s, but that certainly has not been the major reason for this almost steady decline.

In fact the apparently steady decline in the personal saving rate over this period has been due to three separate factors. From 1982 through 1987, it was caused by the first stage of the extended bull market, which in turn was partially fueled by lower bond yields. After the 1987 stock market crash, note that the saving rate actually rose on balance over the next six years. Starting in 1993, it then resumed its decline along with the resumption of the bull market. Ignoring the jagged pattern of the Bush rebates, the saving rate then stabilized, albeit at a low level, from 2000 through 2004. After that, the home equity craze sent the saving rate tumbling for another three years before stabilizing again (the spike in

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Figure 5. Percentage Change in Components of Real Consumption

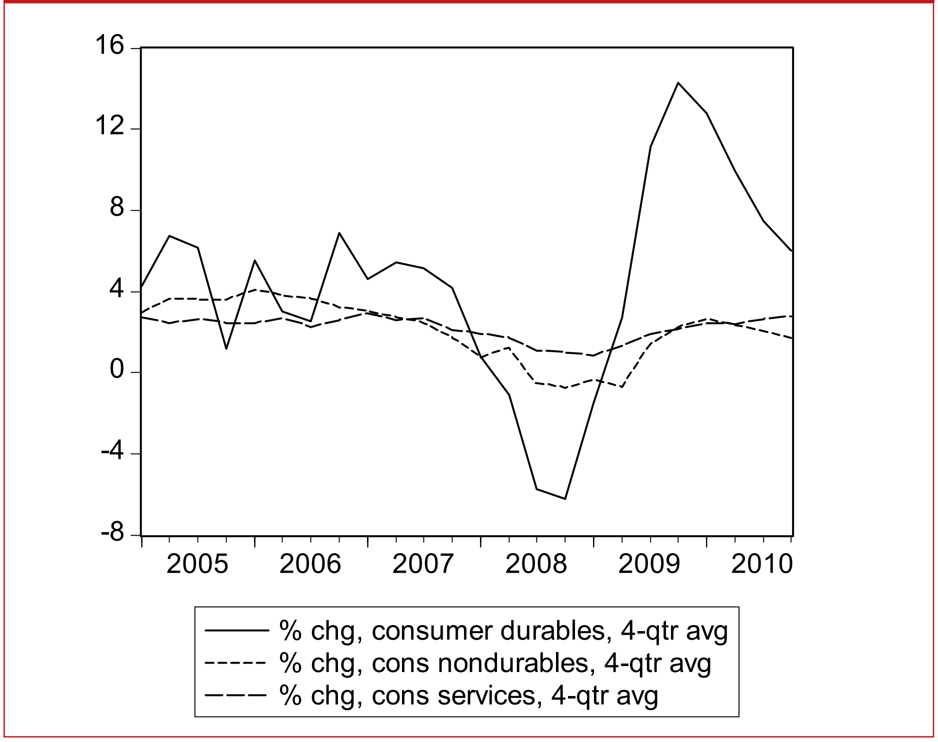
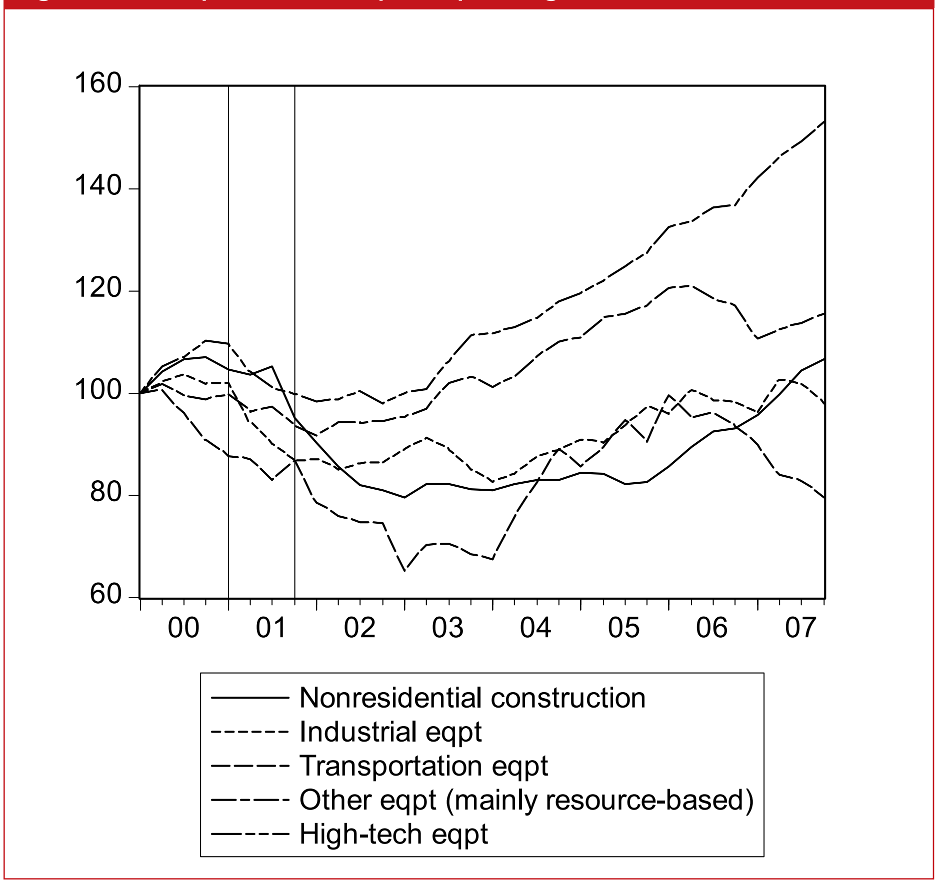


Figure 6. Components of Capital Spending after the Previous Recession



2008.2 is the latest Bush rebate).

To summarize the preceding paragraph, the big drop in the saving rate from 1982 through 2000 was due to the stock market, after which that was no longer a factor. The continued decline was due to home equity extraction, which is also no longer a factor. Hence there will be no semi-exogenous boost to consumption from housing or the stock market over the next several years. While stock prices will rebound next year, it will be many years before they return to their 2007 peaks – just as the market took seven years to reach its old 2000 peaks, and then stayed there only momentarily.

All this is perhaps just a roundabout way of stating the obvious conclusion that over at least the next two years, real consumption will not grow any faster than real disposable income. Assuming no further major tax cuts, that means the growth rate in consumption will be equal to the growth rate in employment plus the growth rate in real wages.

Real wages haven't risen since 1973 and they certainly are not expected to rise during a period of sluggish economic growth. Figure 4 shows the implicit wage raet, wage rate for all production workers, and wage rate for manufacturing workers, all deflated by the consumer price index. While it appears that the implicit wage rate has risen substantially since 1994, that gain includes highly paid senior executives in the financial sector. Those outsize salaries and bonuses are not likely to be repeated over the next several years either.

That leaves employment, which is directly tied to the growth in aggregate demand, of which 2/3 is consumption. That leads to a somewhat circular argument, so we examine the exogenous factors that will determine employment. Without any outside boost to consumption, employment stemming from consumer spending will thus rise at the same rate as employment gains (or losses) from the other components of aggregate demand.

These sectors are discussed below in greater detail, but to summarize at this point, housing will be up slightly, capital spending will be down, net exports will be down, and government spending (including transfer payments) will rise about 3% in real terms (those transfer payments show up in consumer spending on medical care). Taking a weighted average of

Figure 7. Recent History and Forecasts for Capital Spending, Percentage Changes at Annual Rates

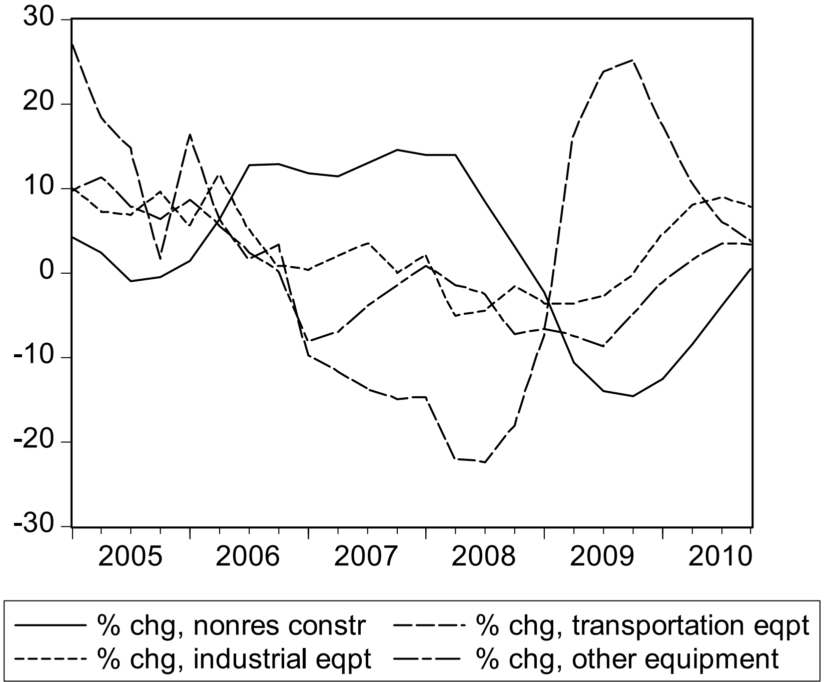
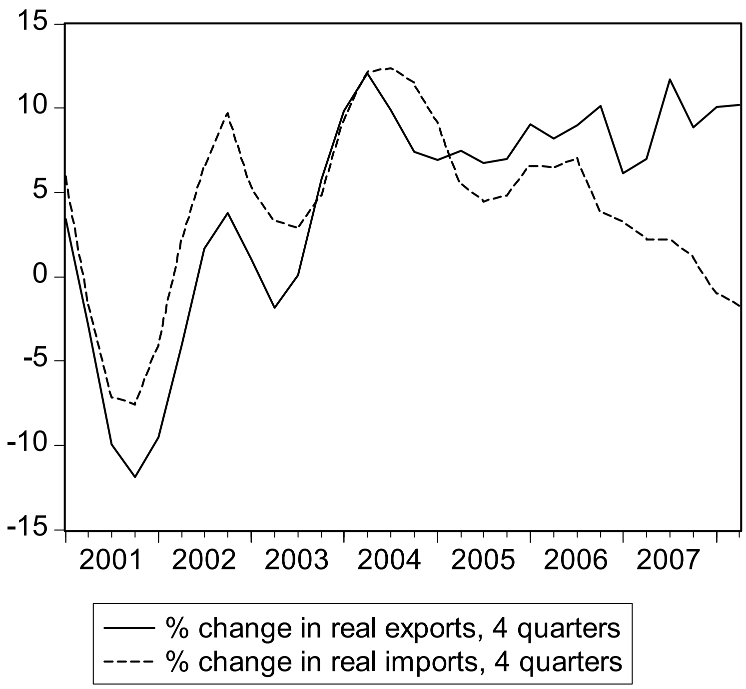


Figure 8. Net Exports and the Value of the Dollar, 2001-2007



these sectors, real growth will be about 1 ½%, and hence total consumption will rise at about the same rate.

By definition, employment gains are equal to the growth in real GDP minus the growth in productivity, which has been rising about 1 ½% per year, which would indicate no gain at all in employment for the next two years. That may be somewhat too pessimistic in the sense that productivity gains are usually closer to zero in recessions. However, there will be only a very slight gain in payroll employment in 2009, with a slightly better gain in 2010.

The forecasts for the individual components of consumption are shown in Figure 5; these are percentage changes at annual rates. The sharp recovery in durables only represents the return of motor vehicle sales to normalcy; after that, the gains will slacken sharply. Only minuscule gains are expected for nondurables. The increase in services primarily reflects the rise in medical care spending, as noted above.

In order to explain the predictions for the various components of capital spending, it is useful to examine their patterns during the previous recession and recovery. In general, capital spending is a lagging indicator, but the lags are far different depending on the particular sector.

There are some similarities and differences. On the similarities side, all sectors of capital spending continued to decline for a while after the recession officially ended. The two biggest laggards were nonresidential construction and other equipment. By comparison, high-tech equipment was flat in 2002 and then started to rise rapidly in 2003. Industrial equipment was flat until 2005. Transportation equipment was the first to rebound.

Looking ahead, nonresidential construction and other equipment are expected to lag the cycle again, with both sectors declining in 2009. The biggest difference is the big rebound in transportation equipment, but that is just the mirror image of the unprecedented drop in truck sales earlier this year in the face of gasoline prices over $4/gal; we think they will drop to about half that next year. Industrial equipment will probably be flat. The constant-dollar data for high-tech equipment are very unreliable, but in general are expected to be flat to down slightly in 2009 before rebounding in 2010. There will be substantial cuts in prices for high-tech

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Figure 9. Recent History and Forecasts for Net Export Ratio and Value of the Dollar

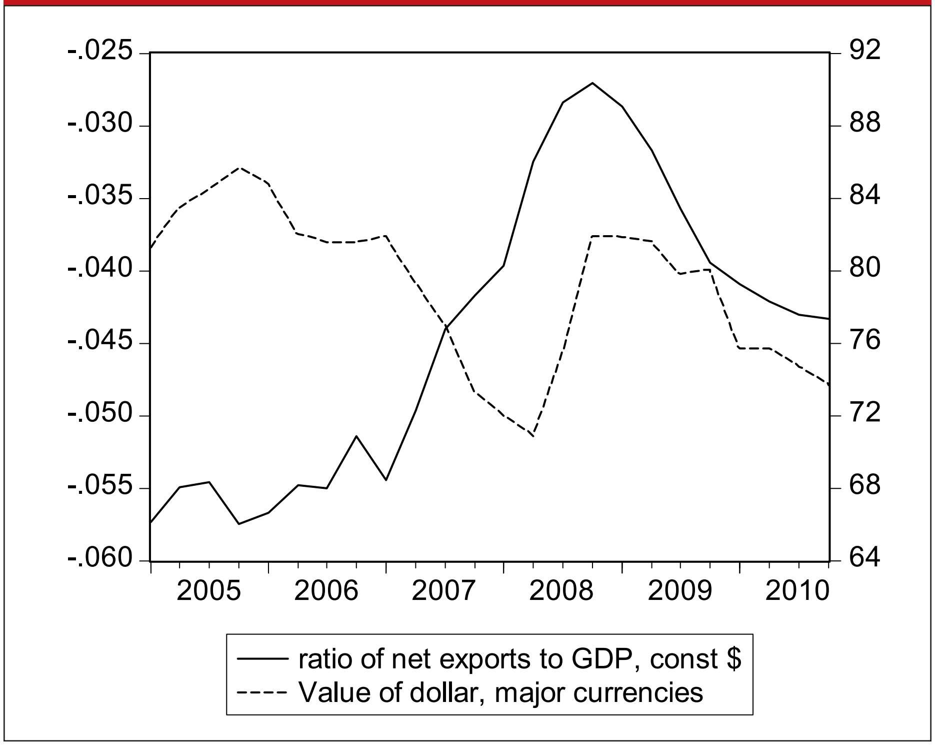
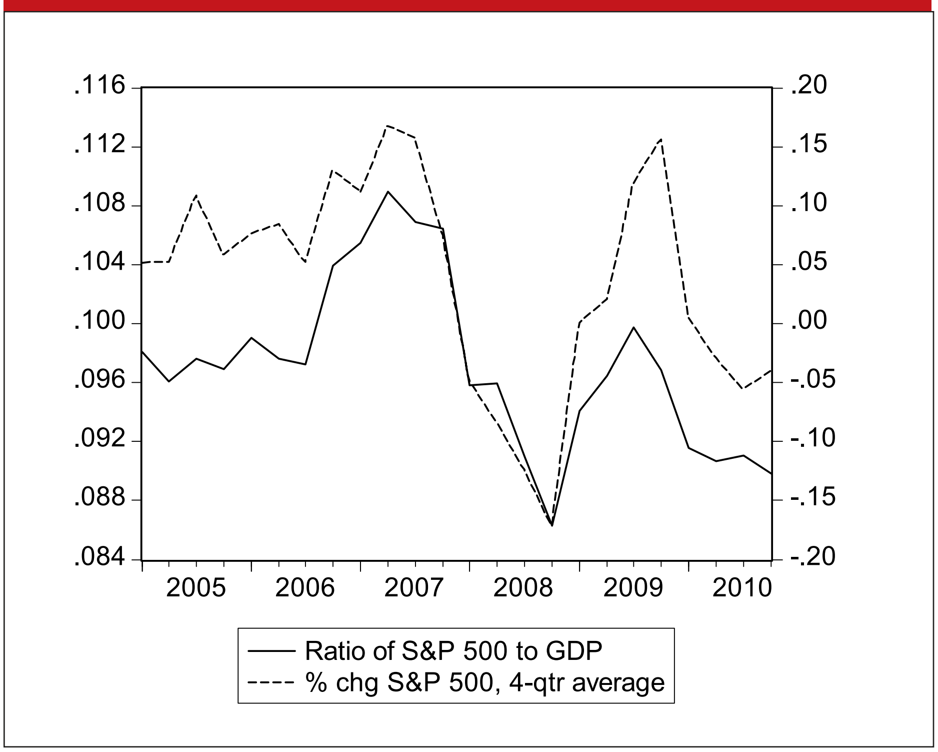


Figure 10. Percentage Change in Stock Prices and the ratio of the S&P 500 to GDP



equipment above and beyond those that have already occurred, but the constant-dollar purchases as measured by BEA won't change very much.

Net exports single-handedly kept real growth positive in the first half of the year, and will post another big gain in the third quarter, although that will not be quite enough to offset the massive drop in consumer spending. Furthermore, they will rise again this quarter, although much of that will be due to lower imports. After that, this engine of growth switches off and net exports will return to their normal patterns of being a drain in GDP over the next two years.

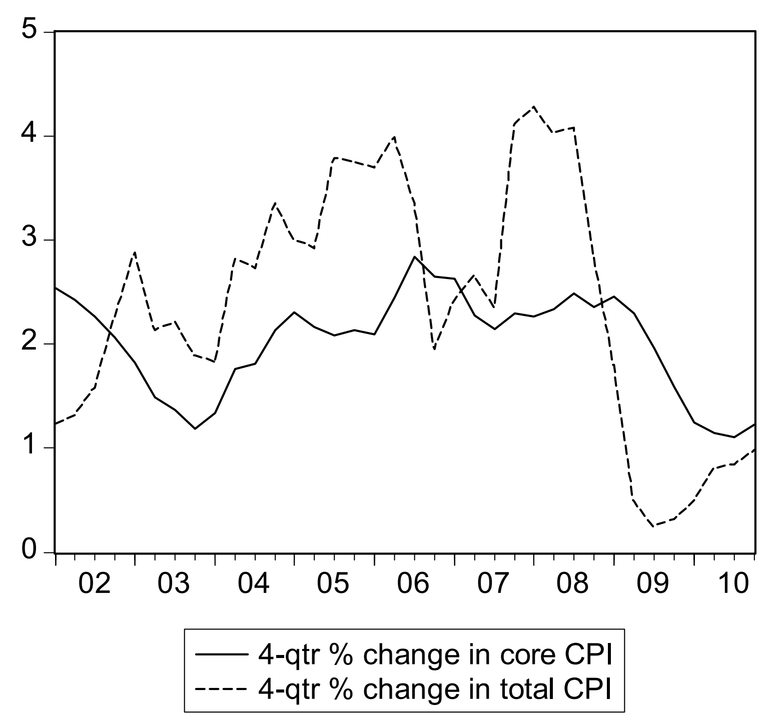
In particular, note what happened to exports in 2001 and 2002 during the previous U.S. recession, as shown in Figure 8. That is the typical pattern; after the U.S. goes into a recession; the rest of the world economy slows down too.

It is indeed the case that exports have remained quite strong through 2008.2. But the net increase in terms of the overall growth rate is due to the sharp decline in imports in real terms. That occurred because (a) consumers were poorer and (b) the dollar was cheaper. Consumer spending will remain sluggish, but the dollar strengthened during the financial crisis, and even though it will give back some of those gains, will remain well below levels during the first half of the year. In general, there is a lag of about a year between the turnaround in the value of the dollar and the turnaround in the trade balance, so net exports will be hurt in 2009.

The dollar troughed in March and then stayed there until July; since then it has risen the not inconsiderable amount of 15%, in spite of – although in fact more likely because of – the financial crisis. Basically, the U.S. economy is still the driver of the world economy. When the U.S. economy gets sick, the rest of the world is bound to follow. When the recession started last November of December, traders sold dollar-denominated assets; now they are repurchasing them as the rest of the world economy starts to go down the tubes.

As noted above, the Fed will perform its duty and do whatever it takes to keep the wheels of credit turning. It appears to have overcome the latest gridlock, in which case no further major infusions of credit will be necessary. As far as interest rates, the Fed probably will not find it necessary to cut

Figure 11. Percentage Changes in the Core Rate and Overall CPI



the funds rate the final one-half point to 1%, as it did in 2002, although we cannot rule this out. Long-term rates are likely to be little changed from current levels over the next two years.

Under Alan Greenspan, the funds rate changed about 1½ percentage points for every one percent change in the unemployment rate, and every one percent change in the core inflation rate. Before the recession started, the Federal funds rate was at 5 ¼%. The core rate was about 2 ½%, and the unemployment rate was 4 ½%. The core rate will decline to about 1% next year, as discussed below, and the unemployment rate will rise to 7%. On this basis, the Federal funds rate would decline 6%, which would make it negative. Obviously the formula breaks down under these circumstances.

The Greenspan rule was based on the hypothesis that if the Fed changed the funds rate by more than the change in unemployment and inflation, it would help stop inflation and unemployment before they got out of control. In fact this scheme encouraged excesses in financial markets, and hence is likely to be abandoned, with a return to the older pattern of a 1% change in the funds rate for every 1% change in core inflation and unemployment. On this basis, then, the funds rate would decline from 5 ¼% to 1 1/4%, which is in the middle of our projected range of 1% to 1 ½%.

In terms of the stock market, the bottom has been reached, but the lows will be tested again, and the eventual improvement will be fairly modest; the 2007 peak will not be reached for several years. In the previous recession, the S&P 500 index dropped an even 50% from its peak in 2000 to its trough in October 2002. It then rebounded 14% by the end of that year, and rose an average of 13% per year for each of the next four years.

This time, the S&P 500 fell 47% from peak to trough, and after retesting the lows, will probably rebound 10-15% for the rest of this year. After that, however, we think increases will be less than the 13% average annual gains of the previous recovery. The economy will be more sluggish, and hence profits will not rise as fast. Furthermore, much of the growth in the stock market was due to those phony financial sector profits, as well as huge gains in metals, energy, and agricultural commodity prices that will not be repeated.

As a result, the ratio of profits to GDP should remain constant, and with interest rates also showing little change, the stock market as measured by the S&P 500 should rise about 2% more than the percentage increase in current-dollar GDP, which will be about 4% per year. In other words, it will be a very sluggish half-decade for stock prices. In particular, the sharp gains at the beginning of the recovery will not be maintained.

We will have a brief period of deflation in early 2009 as benchmark crude oil prices drop to a low of $60/bbl during the trough of the recession, which translates into gasoline prices of $2.00 to $2.50/gallon, depending on state and local taxes. The decline is shown in Figure 11.

From this perspective it may appear that the CPI continues to grow slightly next year, but these are four-quarter averages; on a quarterly basis, the CPI will probably decline in actual value during the first half of the year. This is really not a very important distinction except that we are likely to be deluged with articles about the coming deflation and what it "means". The more important factor is that the core inflation rate will decline to about 1% in 2010, just at it did in 2003.

The brief bout of deflation will be a good thing for consumers on fixed income and no debt, but as prices fall, it will retard the recovery in housing prices. We have already seen the problems caused by deflation in the housing market, so falling prices are a two-edged sword. On balance, very low inflation will not help speed the recovery.

In conclusion, the financial panic has ended, but has left in its wake an economic downturn that will last until early next year. After that, the recovery will be extremely sluggish, similar to the patterns that occurred in 1991-92 and 2002. Looking ahead, real growth over the next several years is likely to average about 2 ½%, less than the 3% gain during the previous recovery and far below the 4%+ gains that used to occur in previous recoveries. It will take many years to rebuild the economy and repair the damage done by negative home equity and irrational financial sector expansion.

About the Author

Dr. Michael Evans has more than 30 years of forecasting experience and is a renowned econometrician. In 1999, he received the Annual Blue Chip Economic Forecasting Award for the most accurate macroeconomic forecasts of the previous four years. He was a featured speaker at the recent EGSA 2008 Fall Technical & Marketing Conference in Atlanta. ■

POWER-GEN Returns to Orlando

All eyes look to Orlando as the On-Site Power Industry gears up for the biggest ticket of the season: POWER-GEN International 2008, to be held December 2-4 at the Orange County Convention Center. This year marks the 20th Anniversary for POWER-GEN, and the event is expected to draw more than 17,000 power professionals from 76 countries and 1,200 exhibiting companies. The Electrical Generating Systems Association (EGSA) will again feature its highly successful On-Site Power Pavilion, a "show within a show" that offers a focus on On-Site Power Generation that is unequaled in the industry.

With close to one million square feet of exhibit space, POWER-GEN International maintains its position as the biggest—and most important—of power industry events. By extension, that makes the EGSA On-Site Power Pavilion—located within the heart of the POWER-GEN show—the most important On-Site Power exhibition of the year as well.

Conference Program

This year's On-Site Power session track touches on a wide variety of issues, trends and topics. From global opportunities and trends to exhaust treatment and technological innovation, POWER-GEN's program could very well set the market's tone for months to come.

The fast-paced, three-day information exchange is designed to share practical experiences, knowledge and ideas on the latest power industry trends and challenges. Attendees will have ample opportunity to network and learn from hundreds of experts about the technologies and trends on the forefront of the On-Site Power Industry's future.

EGSA Events

EGSA will hold its final Basic On-Site Power Generation School program December 3-5 concurrently with POWER-GEN International in Orlando, FL. The Basic School is a general, but still technical, overview of On-Site Power Generation equipment. The Basic School is designed for those who are working in non-technical positions (such as Sales or Marketing, Administrative, or Company Management positions) and for those with less than three years experience working in the industry. As a result, we have "lightened up" several modules to make them **more suitable for less experienced or non-technical personnel**.

Complete details about the Schools—including module descriptions, school schedule and registration information—is available online at *www.EGSA.org*.

Finally, EGSA will hold its annual On-Site Power Reception at the Convention Center on Tuesday, December 2, from 6:15-7:45 p.m. To be held in the Center's Room 5310C-D, the reception provides On-Site Power Professionals with an opportunity to network in a relaxed atmosphere steps away from the hectic show floor. For more information, visit *www.EGSA.org* ■

On-Site Power Educational Sessions

CHP as a Means to Reduce Costs, Fuel and Carbon Footprint—Panel Discussion
Chair: John Hoeft, Advanced Marketing Insights
Co-chair: Andrew J. Ulavege, Enercon Engineering Inc.

Panel forum highlighting the business aspects, markets trends and opportunities for successful CHP systems.

- *Richard Sweetser, Exergy Partners Corp.*
- *Bruce Hedman, Energy and Environmental Analysis an ICF Co.*
- *Geroid Foley, Integrated CHP Systems Corp.*
- *George Simons, Itron*

Green Power – Biofuels
Chair: Warner Bauer, Vaporphase Div., Kickham Boiler & Engineering Inc.

The current status and future of biofuels including biodiesel, landfill gas and biofuel, plus the economics of legislation on and current applications will be discussed.

Advanced Biomass Gasification Plant Planned for Tallahassee
Glenn Farris, Biomass Gas & Electric LLC
Dr. Jan-Willem Konemann, Technisch Bureau Dahlman B.V.

Introduction to Bi-Fuel Technology for Diesel Engine Applications
Chert Nompone, GTI-Altronic Inc.

Using Reciprocating Engines for Green Power Solutions
Chris Whitney, Wartsila North America

Distributed Generation – Technology and Best Practices
Chair: Ray Kacvinsky, Marathon Electric Mfg. Corp.
Co-chair: Michael Clark, PI Encorp LLC

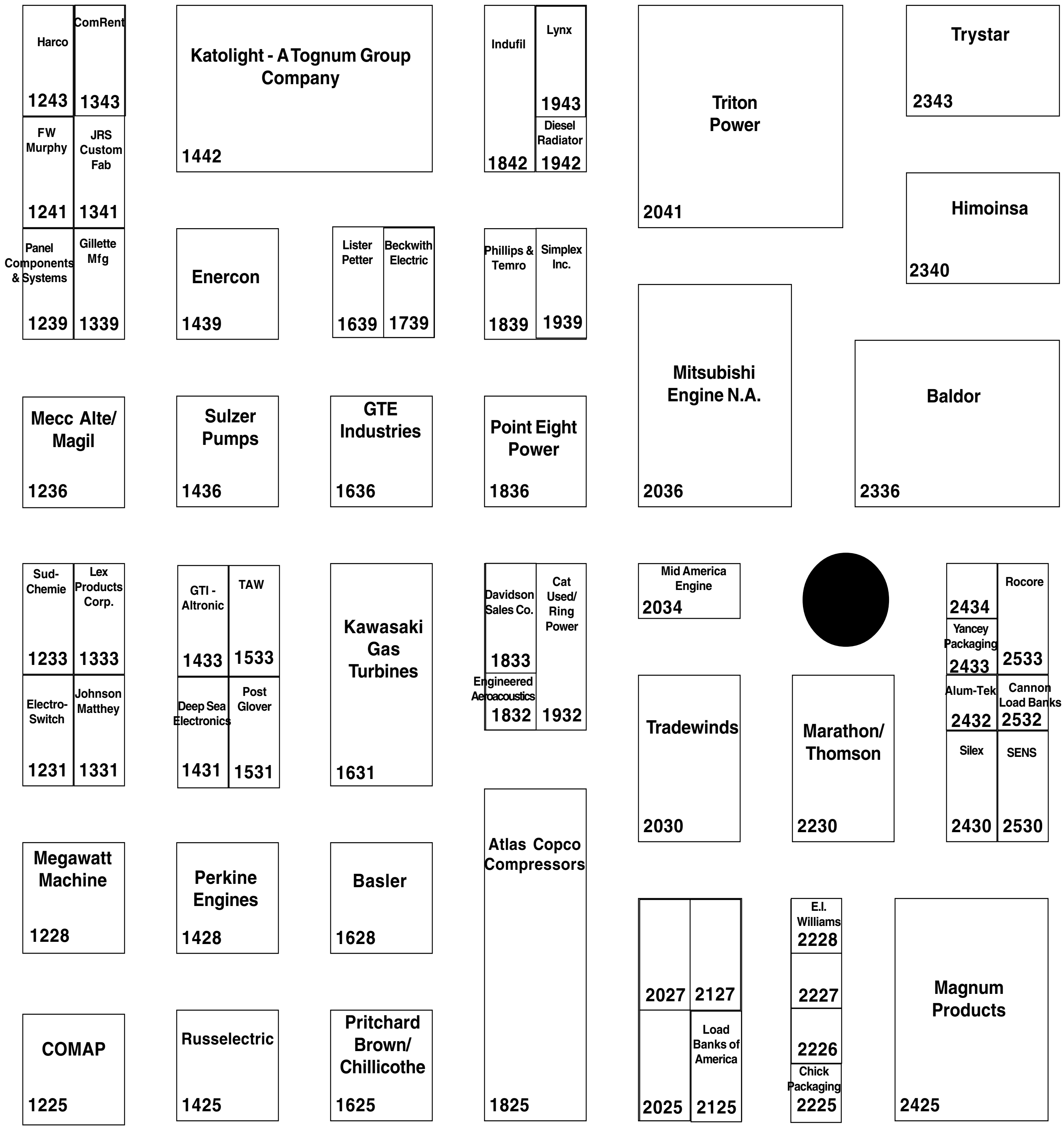
This informational session will offer presentations highlighting the macro-level economic and practical aspects of implementing various types of DG resources across a broad geographic landscape. Case studies will support the premises outlined and infuse a real-world flavor to the proceedings.

Distributed Generation Using PV/Wind and PEM Fuel Cell
Ambrosio Cultura and Ziyad M. Salameh, Univ. of Massachusetts Lowell

Operational Benefits of Distributed Energy Resources
Gene Shlatz, Navigant Consulting Inc.

Microturbine-Based CHP Takes a Bite Out of Big Apple Utility Bills
Edward Bludnicki, UTCPower

Cells, ZEDs and Smart Cities – Smart Applications of Distributed Generation
Sunil Cherian, Ph.D., Spirae Inc.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Simplex Inc. 1939
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Point Eight Power 1836
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Baldor 2336
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Electro-Switch 1231
Johnson Matthey 1331
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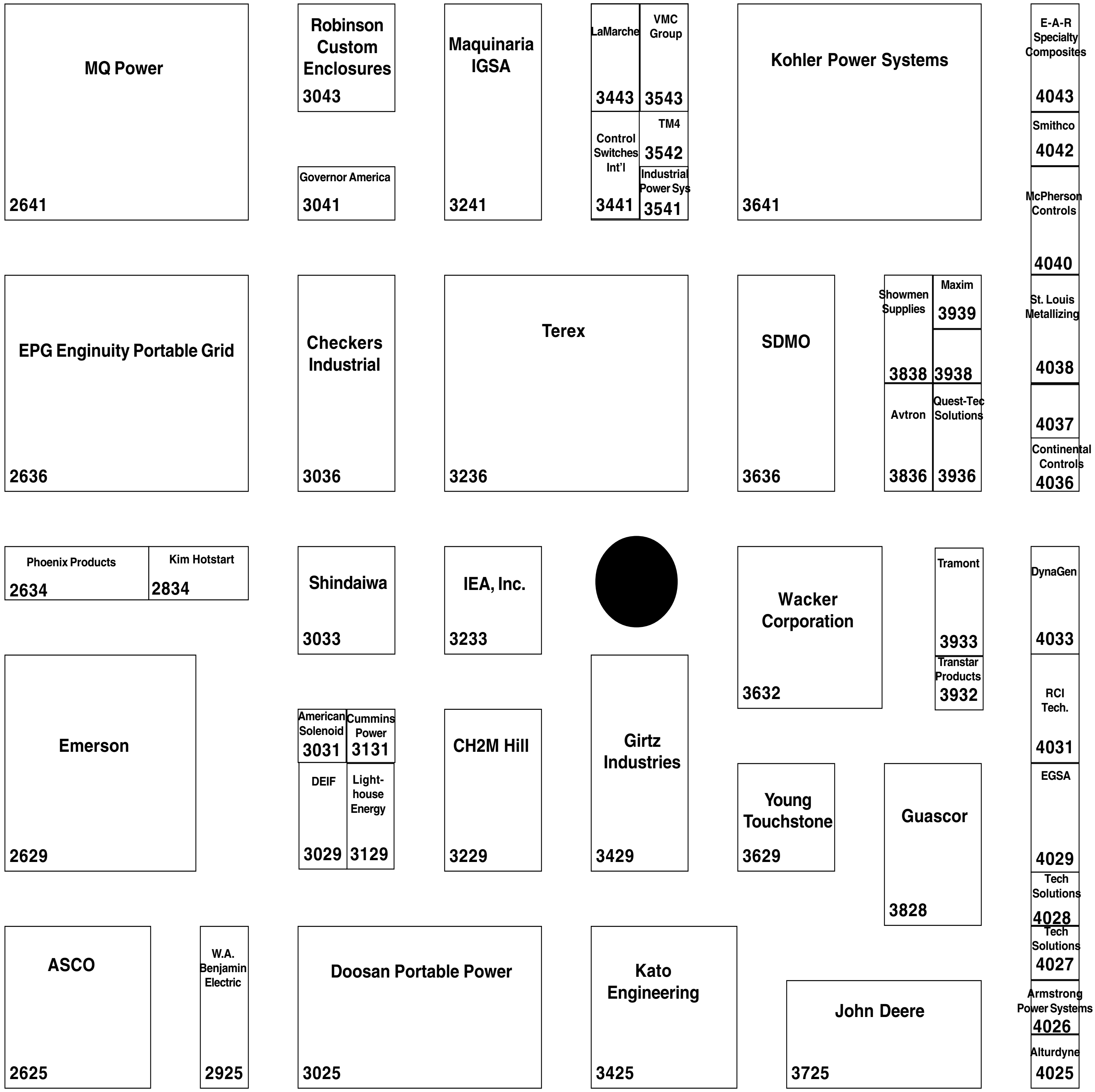
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Kohler Power Systems 3641

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Lighthouse Energy Service 3129
Lister Petter Americas Inc. 1639
Load Banks of America 2125
Lynx Power Systems 1943
Magnum Products LLC 2425
Maquinaria IGSA SA de CV 3241
Marathon Electric/Thomson Technology 2230
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McPherson Controls 4040
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Megawatt Machine Services 1228
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How to Respond Effectively When the Sky is Falling

By Ira S Wolfe

We live in a world of great risk and great possibilities. Every business is in a race against time, influenced by new competitors, new technologies, and demanding – if not fickle and impatient consumers. In a world of increasing complexity and an avalanche of information, making good sense of our world has never been harder.

Some might even argue that the world is already too complicated for us to make sense of it. They act as if we need to just keep our heads down, focus on the trail blazed by other for us, and keep moving.

When a business recognizes that a revolution is under way, its responses are often feeble, held back by fears of leaving the comfort of the old model, especially if it had been successful. Organizations in the past were designed for the industrial age and strategies were developed accordingly.

Today organizations need to mobilize the mind power of the workforce and tap into under-utilized talents, knowledge, relationships and skills. Businesses have unprecedented opportunities to blend the best of the old with the innovation of the new. A golden opportunity exists during this tumultuous business environment to create a durable competitive advantage and generate high returns going forward.

To convert these opportunities into a competitive advantage, management first needs to understand that an essential asset—talent at every level of the organization—required to execute their plans is in short supply and will only get increasingly worse over the next 10 years. Any meaningful change will therefore involve understanding how game-changing workforce trends will change the way business traditionally has recruited, selected and retained employees.

But talent is only the means to the end. First and foremost in taking advantage of the golden opportunity is the design of a business strategy that creates a durable competitive advantage and generate high returns. This requires management to grasp the gravity and complexity of the situation and then to identify and plan for innovative strategies that positively disrupts the status quo within their organization and changes the rules in their favor in the marketplace. Workforce trends are complicating an organization's ability to come up with a winning strategy and then to execute it expeditiously and effectively.

An article published in The McKinsey Quarterly (2007 Number 2) summed it up best: *"Strategic-minded executives may not be able to control the "weather," but they can design a ship and equip it with a crew that can navigate the ocean under all weather conditions."* Executives who select the right people will win the race regardless of the conditions. From this point forward, an organization's success will only be as good as management's ability to decode the rising tide of complexity and its workforce's ability to execute the plan.

The rest of my article focuses on these two key factors: the impending talent crisis, or what I have coined The Perfect Labor Storm, and then the 3 keys drivers of the innovative mind-set.

The Perfect Labor Storm: "Is the Sky falling?"

The United States is in the middle of a talent crisis. Not a day goes by that we are not reminded about our aging workforce and the imminent departure of millions of retiring baby boomers from the workforce with critical knowledge and skills. The 500 largest companies are expected to lose 50 percent of their senior management in five years and the average tenure for U.S. employees is only three years.

For those skeptics who feel all the commotion about worker shortages is mostly hype, essentially given the deluge of layoffs resulting from the recent financial crisis, there is just too much wind in the Perfect Labor Storm sails to ignore what is happening. The numbers speak for themselves.

Every hour nearly 330 baby boomers turn 60. That's 7,920 every day. Baby boomers, who in 2006 ranged in age from 42 to 60, currently represent one-half of the U.S. workforce. By 2015 all of the baby boomers will be 51 to 70 years old. This represents 50 percent of all managers and 45 percent of all professionals (doctors, accountants, lawyers).

The number of people in the U.S. over 55 years old will increase 73 percent by 2020. The number of workers age 55 and over is growing four times faster than the workforce as a whole while the number of young replacement workers between 35 and 45 years old will increase only 5 percent. The population is aging. Jobs are changing. The result is a growing mismatch between available jobs and skilled workers.

Skills

A well-run business needs a strong, talented workforce. Despite recent layoffs and the highest unemployment rate in 5 years, nearly every business is still unable to fiill at least one key position due to the scarcity of talented workers. These shortages are stifling business plans resulting in delayed or cancelled implementations.

The shortage of workers has shifted from a lack of available "bodies" to a serious shortage of workers with needed skills. As recently as the early 2000s, the U.S. Bureau Labor Statistics estimated a shortage of over 10 million workers by 2010 to fill available jobs. I suspect this number is now a bit high due to a combination of automation and job exportation. But this doesn't make the problem any less serious. As our economy shifts from an industrial basis to one of service and knowledge, the basic requirements to qualify for a job have gone up–way up.

Jobs requiring only a GED or High School degree are disappearing. Jobs

requiring at least a 2-year certificate or degree are nearly doubling. The dearth of managers prepared to move up into leadership roles is both eye-opening and mouth-dropping.

As recently as 1991, fewer than 50% of U.S. jobs required skilled workers. By 2015, it is estimated that 76% of U.S. jobs will demand highly skilled employees.

Ultimately, sixty percent of all new jobs in the 21st century will require skills that are possessed by only 20 percent of the current workforce. According to former Secretary of Education Richard Riley, we are currently preparing students for jobs that don't yet exist, using technologies that haven't yet been invented, in order to solve problems we don't even know are problems yet.

Jobs today require special skills. They require some technical knowledge and experience but that's not enough. Trade skills and education merely give a candidate the right to apply. It no longer means they are the best fit. It's the equivalent of being invited to attend the Super Bowl. A ticket allows you to see the game, but not play in it. The skilled worker today must have the ability to work independently but collaboratively, to not just troubleshoot problems but find permanent solutions, to work hard but smart, and to be assertive but personable. Finding skilled workers is becoming more competitive and increasingly more difficult. Unfortunately, these are also the employees that can make-or-break a company. And the shortages only get worse the higher up in an organization you go.

This is a good time to dispel a myth. As I travel around the country and speak with executives and managers in small towns and big cities from coast-to-coast, they are claiming to be the red-haired stepchild when it comes to worker shortages. Skilled worker shortages are NOT – I repeat, are NOT - limited to specific industries or regions of the country. Yes, there are some industries and regions that are more acutely affected than others, but even in areas with unemployment in double digits, recruitment is still going on … and recruiters and hiring managers are not declaring victory in this war for talent.

In reality, almost every industry claims some ownership in the problem, most notably healthcare, technology, and manufacturing. No industry is left behind because skilled workers are just not being "grown" fast enough to fill all the available jobs requiring the ability to deal with ambiguity, to solve complex problems, to collaborate effectively and to communicate across generations. That means vacancies for skilled jobs are filled by employees moving from competitor to competitor and increasingly from one industry to another. In other words, open positions are being filled by "poaching" competitors, not putting the unemployed to work. To add fuel to the fire, when a hiring manager is finally fortunate to find the right employee, wage and benefits demands are out of sight…and going higher.

As a result of changing economic conditions, globalization, and demographic changes, business owners and management alike face a range of unprecedented

human resources challenges, from competition for top talent to spiraling benefits costs. Globalization is increasing the competitive pressures on businesses while rapid advances in technology require new skills and accelerated development of the workforce. The changing business environment is putting more pressure on management to address human resources as a key part of the strategic competitive plan. This will take a team of managers with the capacity to think innovatively about meeting these workforce trends head-on. A failure to do so will impede or implode strategic plans.

In addition to the shortage of skilled workers, two additional factors must be brought to the attention of management and workforce planners: the silent epidemic and a super-sized workforce.

The Silent Epidemic

At the same time that the demand for skills is increasing, a silent epidemic is crippling our ability to graduate enough students. The school bells keep ringing but our future workers are woefully ill-prepared for the demands of today's (and tomorrow's) workplace. That is the ominous message from a landmark survey released in late 2006 by The Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills, and the Society for Human Resource Management.

The survey titled "Are They Really Ready to Work?" indicates that far too many young people are inadequately prepared to be successful in the workplace. It's extremely perilous at the high school level, where well over one-half of new entrants are deficiently prepared in the most important skills: Oral and Written Communications, Professionalism/Work Ethic, and Critical Thinking/Problem Solving.

An even more serious problem is that high school dropout rates are a silent epidemic afflicting our nation's schools.

There are nearly 2,000 high schools in the U.S. where 40 percent of the typical freshman class leaves school by its senior year. For every 100 public high school students who entered 9th grade in United States during the 2001-02 school year, only 68 graduated four years later. This means that almost one-third of all public high school students in America representing 1.23 million potential workers fail to graduate. Breaking it down even further, every 29 seconds another student gives up on school, resulting in more than one million American high school students who drop out every year. Even more alarming is the fact is that only 18 of those 100 students entering ninth-grade will graduate college.

A Super-size Problem

Not only is the workforce getting older. It's getting fatter….and fatter. The implications for a shrinking pool of talent who just happen to be the fattest population in history only means one thing – The Perfect Labor Storm will hit town with more weight than expected.

An estimated 65% of U.S. adults over the age of 20 are obese or overweight. While employers struggle to tighten their

health care cost belts, obesity only threatens to expand their outlays.

Obesity is estimated to account for 43% of all health care spending by U.S. businesses on coronary heart disease, hypertension, type 2 diabetes, hypercholesterolemia, stroke, gall bladder disease, osteoarthritis of the knee, and endometrial cancer. The most obese workers (those 100 or more pounds too heavy) make up 3% of the employed population but account for 21% of the costs of obesity.

But obesity is not just a health care cost problem. Obese employees are twice as likely to be absent 14 or more times per year. Obesity is associated with 39 million lost workdays and is associated with 239 million restricted activity days. Paid sick leave associated with obesity costs employers an estimated $2.4 billion per year.

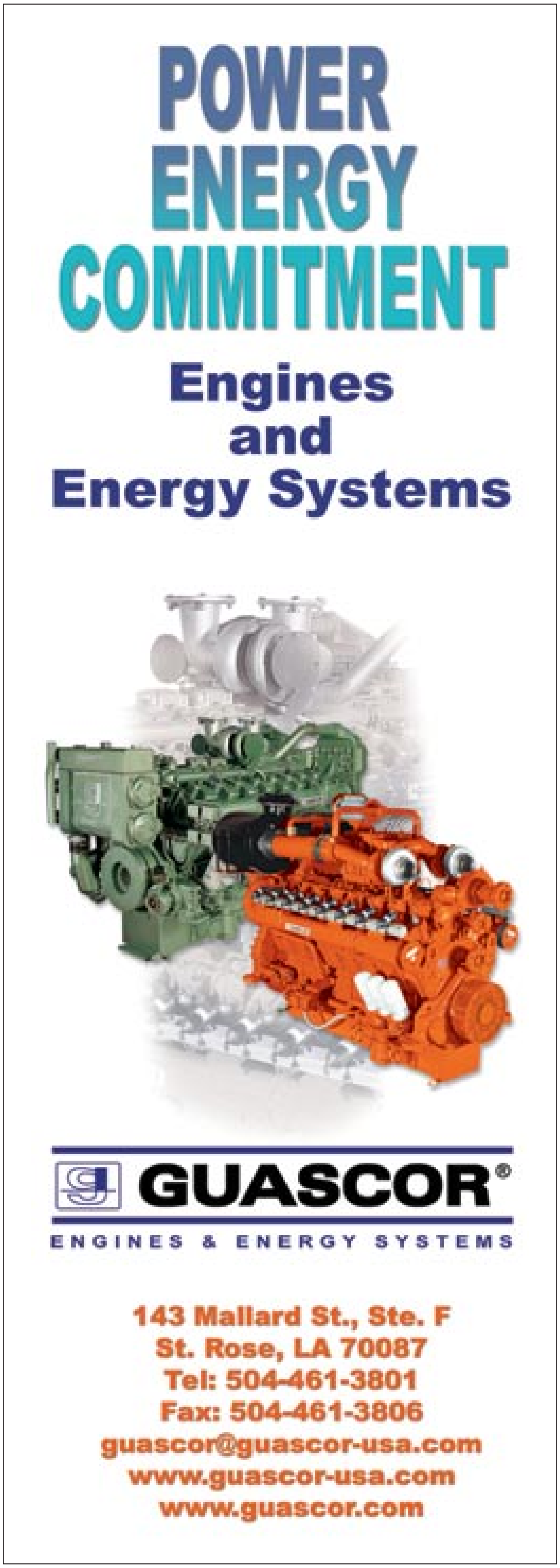
The Perfect Labor Storm is headed your way. No business will escape its path. The question for all business owners and managers then becomes: How will you prepare your business to recruit, retain and motivate employees during the Perfect Labor Storm?

Innovative Capacity: A key to durable competitive advantage

It is now obvious that for anyone attempting to manage their business in today's tumultuous environment, the experience has undeniable similarities to navigating a river with "permanent whitewater." Management today, and into the unforeseeable future, must be able to complete a lot of important work in a short time under harrowing conditions, on the basis of only a few hunches and a lot of instinct, none of them precise.

Leadership plays a vital role in navigating this permanent whitewater. It differs from the role a leader plays in more stable environments. As Albert Einstein said, "there is nothing that is more certain sign of insanity than to do the same thing over and over again and expect the results to be different." When the marketplace is predictable, sticking with the tried-and-true works. But when the conditions include constant change and turbulence, the roles of leader and follower constantly shift. The players must routinely realign their working relationships as situations change and different skill sets are needed. As anyone who has ever negotiated through white-water rapids knows, the leader may at times find him or herself neck deep in whitewater, unable to command. The followers then suddenly find themselves thrust into roles of responsibility.

Unfortunately, current economic conditions have exposed an organizational vacuum that I have been forecasting for years: the inability of many mangers to keep pace when change is complex and conditions are ambiguous and dynamic. In many organizations, managers are expected to process information in real-time but their bandwidth is still "dial-up." Many managers have been thrown head first into new positions of authority and responsibility. Yet they lack the depth and breadth of skills to deal with the unintended consequences of past decisions and unprecedented environmental changes. Successful leaders will possess the ability to respond



effectively to the increased pace of change in an unstable, technologically advanced, globalized economy.

My research has uncovered three key drivers of effective innovative leadership: dealing with ambiguity, resiliency, and authenticity.

Effectively dealing with ambiguity is perhaps the one area where corporate America has the most trouble. Being able to operate in unprecedented, complex and fast-changing conditions means you must be able to deal with uncertainty and vagueness. Every decision you make when you don't have all the information you need entails some sort of risk.

Most businesses however reward predictability, thereby penalizing innovation. Avoiding risk is paramount for career success when playing by the rules offers rewards, recognition and promotion. Initiatives like Six Sigma and TQM focused on zero-defects, attempting to remove even the slightest hint of ambiguity. While these initiatives created unprecedented improvements in productivity, they crushed the ability and/or willingness for people to innovate.

When times were stable and predictable, the need to deal effectively with ambiguity was marginally important. Times have changed abruptly. Succeeding under today's economic conditions requires management to navigate decisions and solve problems with extreme confidence albeit through a sea of uncertainty. Ninety percent of the problems that managers solve are ambiguous – it's neither clear what the problem is nor what the solution is. The competitive edge will go to those who can comfortably make good decisions with less than all the information, in less time, with few or no precedents on how it was solved before.

A second driver is resiliency, the ability to rebound, adapt and learn even in the face of adversity and stress. Resilient people have the uncanny ability to pick themselves up after being knocked down. From nearly any experience, they're able to create options – they know there's always a way out and they will find it. It's important to avoid confusing resiliency with its polar opposite rigidity. Rigidity is represented by inflexibility, a desire to stick to the plan at all costs even when the evidence is overwhelmingly stacked against success. Rigidity infers a fear of failure and a need to be right. Resilience in the face of adversity requires adaptability and flexibility and is the greatest long-term predictor of success. As Thomas Edison said, 'there is always a way to do it better…find it."

Authenticity is a third driver. Authentic means meaning what you say and saying what you mean. Authentic people are straight-shooters; they believe that living by their core beliefs is the most important and highest value. Their actions are congruent with values: they walk the talk and are not afraid to "tell it like it is." You may not always like what the authentic person says, but you always know where he or she stands on an issue. The opposite of authentic is political. Political people are always navigating or positioning for self-advantage. Authenticity is about being genuine. When navigating the uncertainty of permanent whitewater, politics and self-interest are at the very least destructive traits and at their worst deadly strategies.

Navigating a business successfully through turbulent times requires the ability to deal with ambiguity, be resilient in the face of adversity, and being authentic. Consequently, leading through permanent whitewater requires flexibility, humility, and, paradoxically, the willingness to follow when others are better equipped to lead.

Set your destiny

The Perfect Labor Storm and the concurrent financial crisis have created an environment of unprecedented change and golden opportunity. Your company will be challenged to change in a way for which it has no precedent. Decades of orthodox management decision-making practices, organizational designs and approaches to employee relations provide no real hope that companies will be able to avoid faltering or suffering painful restructuring.

The ability to make sense out of things is a much sought-after talent these days. Some people are quite resourceful, making great decisions and troubleshooting problems with the information they have on hand. But what happens as complexity increases and change happens more often?

Many managers believe the best solution to fixing their current problem is sharpening their saw. But sometimes the sharpest saw in the tool box is the wrong tool. The available information is sometimes ambiguous. At other times it is contradictory. Before cutting and contouring just for the sake of doing something, it might be best to identify what is it you exactly want to have in the end.

Because of the rapid pace of change, more and more people need to make good decisions without any current information at all. The sheer scale, connectivity and speed of the change are unprecedented, stretching our old ways of thinking to the breaking point. The world is reorganizing on the fly. The best tool may not be a saw at all but a instrument that hasn't even been invented yet.

Only new approaches to setting strategy, managing employees and recruiting talent to maximize returns will provide companies with a durable competitive advantage.

The real opportunity that companies have today is to take control of their own destinies and begin to consciously innovate. While executives and business owners of competing companies will typically opt for ad hoc changes, the astute leader will seize this opportunity to trump the competition by creating an advantage that beat rivals to the punch and that they can't duplicate. Leadership is not just about adapting to changed realities in the environment but creating new realities.

About the Author

Ira S. Wolfe is president of Success Performance Solution, a workforce planning firm specializing in pre-employment and leadership assessment. He is a highly regarded expert on workforce trends and best practices in hiring and management succession. He is also the author of several books including The Perfect Labor Storm 2.0. Mr Wolfe was a featured speaker at the recent EGSA 2008 Fall Technical & Marketing Conference in Atlanta, GA. ■

Are Your Standby Generator Sales Slumping or Jumping?

By David Dugan, Sales Manager, GenTech Warranty Plus!

We're all aware of the cyclical nature of the economy. We also know how difficult it is to keep our sales organizations on track to meet their sales projections and modest growth goals during these tough times. While some businesses are content to hunker down, cut expenses and just weather the storm until the economy improves, others take a much more proactive approach and find ways to build and increase their sales during the slow times. At least that was the situation until the standby generator business took on so many additional players due to the boom in sales during and after the 2005 and 2006 hurricane seasons. As a result, the market share for long term businesses has been further diluted.

Here's how some of the veteran businesses have not only held on but actually increased sales and profits during this period. Established businesses know that the key to longevity is dependability and creativity. Learning to stay ahead of the curve by being proactive rather than reactive is essential. We have to anticipate slow sales and/or service periods and ramp up our organizations in advance to keep our customers happy and contributing to our bottom line! Hard work is always a common thread that connects successful business owners, however working smart is essential, too. Adding new tools to our service organization—whether it's adding a new computerized diagnostic machine, sending employees to schools, initiating/participating in CSI programs or providing longer warranties to provide customers with increased confidence and peace of mind—can keep existing customers and provide expansion through referrals. Experts cite these as examples of value-added services that elevate the stars of our industry and create expansion even in down markets.

When asked how they can maintain or even increase this momentum, they state, "We didn't get to this position by waiting for business to come to us. It is common knowledge that during times of a tightening economy people spend more money on maintenance and service. It only makes sense then for us to concentrate on those areas which we already know and practice while always looking ahead, including and

increasing the value-added services that customers have grown to expect. Customers want us to care about their needs and look to us as the experts; they expect us to provide the solution to their problems before they ask! This, in turn, builds customer rapport and name recognition so that when sales naturally return as the economy improves we are positioned to be the first one they call."

Some dealers increase profits by including a warranty and preventive maintenance (PM) contracts packaged together. By doing this they ensure that no matter what might fail on a customer's unit, the customer never has to worry about being blindsided by huge bills while they are trying to cut back on costs.

Other aggressive dealers have similar approaches: take what you have available and build on it. Go to that dusty stack of customer files—customers that have not purchased anything from you in one or more years—and pick up the phone or send out a company representative. Chances are that the customer actually needs services and/or warranty protection and is either unaware of the fact or has simply put it off. Now is the perfect time to help him protect his investment and remind him who is there to help him, not just take his money when the storm is approaching or has just passed!

One large surplus dealer that has been in business for over 40 years has taken a proactive approach but in a slightly different way. They do a huge business in late model used and surplus equipment. Much of their equipment is used not only for standby but cogeneration and sometimes prime power as well. As the U.S. economy began to falter, they targeted overseas markets whose currency value and recent trade agreement situations made the purchase of pre-owned U.S. equipment a real bargain. Customers in Monaco, United Arab Emirates, Venezuela, Colombia, the Caribbean basin, etc., were in great need and anxious to purchase these units but nonetheless leery of the condition and dependability after delivery. "The challenge", the dealer says, "was to make the overseas customer comfortable with the fact that they were getting what they were expecting". They did this by providing them with a professional installation, sending their technicians to oversee each installation and provide a product protection plan that guaranteed both the generator and the installation. Self-insuring the equipment (one way to go) could potentially expose the dealer to liabilities that can far surpass the profits of a sale. They needed an alternative fixed cost way to provide protection for their customers and themselves. Due to legalities and language problems, writing a product protection policy for each customer for each unit in the several different countries just isn't practical or even feasible.

What the dealer needed was for some-

one to "share their pain" should a catastrophic failure occur. As a result, the dealer researched product protection plans to see how they could provide their customers "peace of mind guarantees" while not putting themselves on the hook should an expensive failure occur. Our company, for example, normally offers standard product protection plans for dealers and OEM's in the U.S. market for new and used generator sets. However, realizing that this situation was going to repeat itself (and of course anxious to earn and develop business) we took the problem to our underwriters. Initially we were turned down. Nonetheless, we were all convinced that this program was the wave of the future. To this end, we developed a "Contractual Liability Policy" whereby we provide the program backed by our underwriters to insure each unit to the U.S. dealer, not the end user in a foreign country. In this way all legalities, currencies and language are based in the U.S. and provide the end-user with the necessary protection right in their sales contract with the dealer.

While warranties are sometimes criticized as bad investments, it is generally agreed that it all depends on several factors. How costly could the potential repair be in relation to the price of the warranty? Have the underwriters established themselves as reliable and reasonable, paying claims that are justified in a timely fashion? If these questions can be answered satisfactorily then a warranty can indeed be a good investment. And adding it to a service contract should ensure that owners can expect to get maximum long-term performance and value from their equipment.

From a bottom line perspective, generator dealers and OEM's are finally finding out what automotive dealers, appliance companies, electronics dealers and virtually all big ticket item purveyors have long realized: there is tremendous potential to garner additional profits while improving customer satisfaction and loyalty through offering extended product protection plans. Product protection plans are not an item that has to be stored, floor-planned, lubricated or otherwise maintained or paid for in advance—you simply apply it as needed.

If your generator sales are languishing down there with the economy, take a fresh approach: create a market and develop profits out of what you have readily available without adding any more expense than a phone call, a stamp or a short drive across town to see an old client. Whether you have one employee or 100, you will quickly be amazed at the additional earnings and improved customer relations you can generate for your company.

Editor's note: GenTechWarrantyPlus! is an active, enthusiastic member of EGSA and will be particpating at their third POWER-GEN Show in Booth #2848. They welcome your calls and inquiries at any time, but especially hope that you stop by to visit at the Show. ■

William Roberts Joins Foley, Incorporated

Eric Lavin, Engine Division Rental Manager of Foley, Incorporated, the Caterpillar Dealer in North Jersey, Staten Island, and Bermuda, has announced that William Roberts has joined Foley, Incorporated as Rental Account Manager for the Power Systems Division.


William Roberts

Roberts comes to Foley with over 12 years of experience in the power and temperature control rental industry. He most recently worked with Aggreko in Linden, NJ, where he performed a wide array of sales, managerial and technical functions related to the design and installation of temporary power generation, electrical distribution and HVAC process cooling systems for multiple market segments. Prior to this, Roberts spent nearly 10 years as an Applications Specialist at GE Energy Rentals where he worked with customers conducting site surveys and providing technical support. Roberts was also an Electrician/General Operator for SBP Industries in Rahway, NJ and has worked in the electrical industry for 23 years.

As a Rental Account Manager, Roberts will be responsible for providing support to our Power Systems Division customers, as well as seeking out rental growth opportunities. Lavin states, “Bill’s diverse background in sales, project management, customer interaction and technical support makes him a real asset to our team. His knowledge of our product and customer base will allow him to hit the ground running as a Rental Account Manager.”

Saft Wins Contract from Titan Energy Development

Titan Energy Development, Inc., the Detroit-based subsidiary of Titan Energy Worldwide, Inc. and exclusive manufacturer of the state-of-the-art Sentry 5000™ mobile utility system, has selected Saft to power its Renewable Energy Mobile Utility

System (REMUS). Designed for military applications, REMUS incorporates renewable wind power, solar power and battery power to supplement a dependable diesel generator and provide utility scale electrical

Continued on next page

services in situations where continued fuel sources are not available or too costly.

Under the new contract, Saft is supplying a rechargeable lithium-ion (Li-ion) battery system, which is part of its standard line of products for Hybrid Electric Military Vehicles (HEMV). The Li-ion system recharges using renewable energy generated by the trailer's wind turbines and solar panels, enabling REMUS' diesel generator to run more efficiently and reduce fuel costs. The battery is also responsible for powering the trailer's HVAC and lighting package.

Titan Energy Development was contracted to build REMUS by NextEnergy, a Michigan nonprofit dedicated to advancing the development of alternative energy technologies. In coordination with the U.S. Defense Logistics Agency (DLA), the REMUS will provide electricity, heating and cooling for a new deployable military depot and communication suite and will also provide domestic support during natural disaster response and relief efforts.

Saft is a world specialist in the design and manufacture of high-tech batteries for industry. For more information, visit Saft at *www.saftbatteries.com*.

AMSC Licenses Wind Turbine Designs to Hyundai

American Superconductor Corporation has licensed two of its proprietary wind turbine designs to South Korea-based Hyundai Heavy Industries Co., Ltd.

Under the terms of the contracts, AMSC Windtec™ subsidiary will license designs to HHI for its proprietary 1.65 megawatt (MW) and 2 MW doubly fed induction wind turbines. HHI plans to commence production of 1.65 MW wind turbines by the end of 2009 and will initially target the U.S. market. For more information, *visit www.amsc.com*

Cummins Rental Power Units Put Companies Back in Business

When the Cedar River crested near 32 feet in mid-June, it reached its highest point in recorded history. In addition to breaking records, the flood shattered homes, businesses and lives.

Many parts of the area were under nearly 10 feet of water and a total of 1,300 city blocks lost power due to the heavy flooding. Cummins Power Generation supplied 35 Rental Power units to 18 companies, helping Cedar Rapids power its recovery with more than 25 MW of emergency electricity.

It will take years for Cedar Rapids to fully repair the damage from the devastating floods of 2008. But business owners in the area found consolation in the fact that Rental Power units were available fast to start the recovery effort. Cummins distributors—such as Cummins Atlantic LLC, Cummins Bridgeway LLC, Cummins Mid-South LLC, and Cummins NPower LLC—supplied mobile Rental Power units to 17 other businesses, including telecommunications companies, hotels and grocery stores essential to getting Cedar Rapids back on its feet.

Along with serving businesses, Cummins Power Generation supported the entire community with trailerized weatherproof generator sets that were used to supply power to pump water away from underground utility transformers and to run dehumidifiers in numerous locations throughout the city.

Cummins Power Generation is an international supplier of rental power systems for prime, emergency, standby, peak shaving and distributed generation applications. For more information, visit *www.cumminspower.com/rental*.

Emerson to Provide Infrastructure for State-of-the-Art Data Center

Emerson Network Power has announced that construction has begun on an innovative data center at Emerson's corporate headquarters that will showcase a full suite of the leading, energy-efficient technologies from Emerson Network Power. The 35,000-square-foot data center, set to open next summer as a technology showcase center for current and potential customers, will support the $22 billion company's global network, including more than 250 worldwide manufacturing and engineering operations.

The new state-of-the-art facility will feature numerous Emerson Network Power products from brands such as Aperture, ASCO, Knurr and Liebert interacting with technologies from the world's leading IT companies. Collectively, these technologies comprise a highly available, reliable and concurrently maintainable physical infrastructure that can be remotely managed.

Continued on page 53

Application for Membership

ELECTRICAL GENERATING SYSTEMS ASSOCIATION

1650 South Dixie Highway, Suite 400 , Boca Raton, FL 33432 • (561) 750-5575 • FAX (561) 395-8557
E-Mail: *e-mail@egsa.org* • World Wide Web: *www.egsa.org*

EGSA's mission is to bring together representatives of the various segments of the On-Site Power Industry, to learn, share ideas and experiences, advance the science of On-Site Power generation, improve performance and profitability of members, and the quality of service to power users.

1. Contact Information

Please type or print all information in upper and lower case (NOT ALL CAPS!)

Company _

Address __

City ______ State/Province ______

Zip/Postal Code ______ Country ______

Phone ______ FAX ______

Official Representative ______ Title ______

Representative's E-Mail ______ Company's Web Address ______

How did you hear about EGSA? ❏ Web site ❏ *Powerline* magazine ❏ Colleague ❏ POWER-GEN ❏ Other ______

Why are you joining EGSA? ❏ Certification Program ❏ CEU Program ❏ Power Schools ❏ Buyers Guide Listing ❏ Other ______

2. Member Classification

Read the Membership classifications below and check the box that describes your firm's classification.

I. FULL MEMBERSHIP

❏ MF **Manufacturer Membership**
Any individual, sole proprietor, partnership or corporation seeking membership must apply for a Full Membership as a manufacturer if they meet one or more of the following criteria:

1. They manufacture prime movers for power generation.
2. They manufacture generators or other power conversion devices producing electricity.
3. They manufacture switchgear or electrical control devices.
4. They manufacture or assemble generator sets, UPS systems, solar power, hydropower, geothermal, or any other power production or conversion system including related components or accessories for national or regional distribution.
5. They are a wholly owned subsidiary of a firm which qualifies under rule one through four.

❏ DD **Distributor/Dealer Membership**
Any individual, sole proprietor, partnership or corporation actively engaged as a distributor or dealer for products listed under Manufacturer Membership may apply for Full Membership as a Distributor/Dealer. If an organization qualifies under Manufacturer Membership, it is not qualified under this section.

❏ CI **Contractor/Integrator Membership**
Any individual, sole proprietor, partnership or corporation actively engaged as a Contractor or Equipment Integrator of products listed under Manufacturer Membership, not brand by brand, geographic territory or contractually obligated as a Distributor/Dealer of a specific product. These firms typically purchase products from a Distributor/Dealer, Manufacturer or Retailer, adding value through installation, product knowledge, relationships, unique services, etc., and then re-sell the resulting product to an end-user.

❏ MR **Manufacturer's Representative Membership**
Any individual, sole proprietor, partnership or corporation actively engaged in the representation of products listed under Manufacturer Membership may apply for Full Membership as a Manufacturer's Representative. If an organization qualifies under Manufacturer Membership, it is not qualified under this section.

❏ EM **Energy Management Company Membership**
Any individual, sole proprietor, partnership or corporation engaged in energy management, including Energy Service Companies (ESCOs), Independent Power Producers (IPPs), Integrators, Aggregators, and other similar enterprises may apply for Full Membership as an Energy Management Company.

❏ **Associate Full Membership** (mark appropriate category at right)]
Any individual, sole proprietor, academic institution, student, partnership or corporation meeting the requirements of Associate Regular Membership may apply for Full Membership at their option to enjoy the privileges of Full Membership, including the rights to vote and to serve on EGSA's Board of Directors. Initiation fees and annual dues will be assessed at the existing non-manufacturers' Full Member rates.

II. ASSOCIATE REGULAR MEMBERSHIP

❏ AA **Trade Publication Membership**
Any trade publication dealing with the electrical generating systems industry or its suppliers may apply for Associate Membership—Trade Publications.

❏ AB **Trade Association Membership**
Any trade association made up of individual or company members sharing a common interest in the electrical generating systems industry may apply for Associate Membership—Allied Associations.

❏ AC **Engineer Membership**
Any consulting or specifying engineer may apply for Associate Membership—Engineer. Membership may either be held in the employer's name or individual's name under this classification. Individuals whose employer qualify as a Full Member, as described in the Full Membership section, do not qualify for this category.

❏ AD **End-User Membership**
Any individual employee of a company who owns or operates electrical generating equipment and/or related switchgear or components, whose responsibility to his employer includes planning, design, installation, supervision, or service of such equipment may apply for Associate Membership—User. Membership may either be held in the employer's name or individual's name under this classification. Individuals whose employer qualify as a Full Member, as described in the Full Membership section, do not qualify for this category.

❏ AE **Service Membership**
Any individual, organization or academic institution that offers services such as research, testing or repair to the electrical generating systems industry may apply for Associate Membership—Services. Membership may either be held in the individual's name or the organization's name under this classification. Individual companies whose employer or parent organization qualifies as a Full Member, as described in the Full Membership section, do not qualify for this category.

❏ AG **Educational Institution Membership**
Any postsecondary vocational-technical school or college offering on-site power generation-related instruction may apply for Associate Membership-Education Institution.

❏ AR **Retiree Membership**
Any individual who retires from a member company may apply for Associate Membership—Retired. This classification does not apply to any individual who is employed more than 20 hours per week.

❏ AF **Student Membership**
Any individual currently enrolled at an academic institution may apply for Associate Membership—Student.

Application for Membership – page 2

Dues Schedule (Use for Section 3)

	Annual Dues	Initiation Fee	TOTAL
Manufacturer	$825	$200	$825
Energy Management Companies	$825	$200	$825
Distributor/Dealer	$285	$100	$285
Contractor/Integrator	$285	$100	$285
Manufacturer's Rep	$285	$100	$285
Regular Associate Member	$200	$100	$200
Full Associate Member	$285	$100	$285
Retiree Member	*Complimentary*	$0	$0
Student Member	*Complimentary*	$0	$0

Initiation Fee is Waived Through 2/28/09!

NOTE: A FULL 12-MONTH DUES PAYMENT MUST BE RECEIVED WITH THIS APPLICATION. The Association's Membership Year is January 1 through December 31. Dues payments that extend beyond the first Membership Year will be applied to the second year's dues.

FULL PAYMENT MUST BE RECEIVED WITH APPLICATION.

3. Membership Dues (Please fill in the appropriate TOTAL amount from the above dues schedule.)

Membership Dues $__________

Membership Plaque (optional)** $ 39.95**

On-Site Power Reference Book (optional)** $ 125.00**

Florida Residents: Add 6.5% Sales Tax to ** items $__________

*Continental US Residents add $5 shipping/handing to**items.* $__________

*Non Continental US Residents should call EGSA Headquarters for shipping charges for **items.* **TOTAL** $__________

4. Payment Method (Payable in US$ drawn on U.S. bank, U.S. Money Order, or American Express)

❏ Check #____________ Amount $ __________

❏ Money Order

❏ Mastercard ❏ Visa ❏ American Express

Card # ____________________________ Exp. Date ______

Signature: ____________________________________

Print Name: ___________________________________

5. Products/Services

Please describe the nature of your business (50 words or less, NOT ALL CAPS). If you are a Manufacturer's Representative or Distributor, please indicate for manufacturers you represent and/or distribute for; if a student, please provide name and location of your school, your major and your anticipated graduation date:

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Do you buy AND sell equipment? ❏ Yes ❏ No Do you manufacture packaged equipment? ❏ Yes ❏ No

Available Codes:

01 ---Batteries/Battery Chargers
02 ---Control/Annunciator Systems
29 ---Education
30 ---Emission Control Equipment
04 ---Enclosures, Generator Set
05 ---Engines, Diesel or Gas
06 ---Engines, Gas Turbine
07 ---Engine Starters/Starting Aids
08 ---Filters, Lube Oil, Fuel or Air
28 ---Fuel Cells
03 ---Fuel Tanks and Fuel Storage Systems
09 ---Generator Laminations
10 ---Generator Sets
11 ---Generators/Alternators
12 ---Governors
13 ---Heat Recovery Systems
14 ---Instruments and controls, including meters, gauges, relays, contactors, or switches
15 ---Load Banks
16 ---Motor Generator Sets
17 ---Radiator/Heat Exchangers
18 ---Relays, Protective or Synchronizing
19 ---Silencers/Exhaust Systems/Noise Abatement
20 ---Solenoids
21 ---Swtichgear and Transfer Switches (Automatic or Manual), Bypass Isolation Switches, and/or Switchgear Panels
22 ---Trailers, Generator Set
23 ---Transformers
24 ---Uninterruptible Power Supplies
25 ---Vibration Isolators
26 ---Voltage Regulators
27 ---Wiring Devices or Receptacles

Enter codes here:

Products sold: ______________

____

Products rented: ______________

____

Products serviced: ______________

____

6. Sponsor(s)

: A"Sponsor" is an EGSA Member who interested you in filling out this application. It is not mandatory that you have a sponsor for the Board to act favorably on this application; however, if a Member recommended that you consider membership, we request that individual's name and company name for our records.

Sponsor Name ______________________________Company Name ______________________________

7. Official Representative's Authorization

Signature ____Date ____________________

Continued from page 48

The data center will have three layers of redundancy, with dual utility feeds, redundant UPS protection and onsite generators. Additionally, the data center will be scalable, with redundant dual-bus power capacity starting at 1,350 kW and ultimate UPS systems scalability up to 4,050 kW across dual paths. Cooling capacity will be upwards of 300 W per square foot.

Based on the data center architecture and technology infrastructure, Emerson anticipates receiving LEED Silver Certification from the U.S. Green Building Council. Emerson is one of the first companies to voluntarily participate in the process of earning data center-based green credits in the core areas of energy efficiency, indoor environmental quality, materials, resources selection, sustainable site development and water savings.

It is estimated that the design will provide Emerson an energy savings of 17.5 percent as compared to a traditional data center. The energy-saving attributes include daylighting features, a reduced building footprint, and one of the largest roof-top solar arrays used by a data center, which will provide 100 kW power to the IT load. As IT equipment is installed, Emerson will follow applicable strategies recommended in Emerson Network Power's *Energy Logic* to yield additional energy savings.

The data center is part of a global data center consolidation effort at Emerson that will integrate the operations of more than 100 data centers into four facilities.

Emerson is a global leader in bringing technology and engineering together to provide innovative solutions to customers through its network power, process management, industrial automation, climate technologies, and appliance and tools businesses. For more information, visit *www.Emerson.com*

DEUTZ Announces Name Change

DEUTZ Power Systems GmbH, a leading supplier of plants for decentralized power generation, has returned to its roots by taking back its old name: MWM—Motoren-Werke Mannheim. Said, Axel Weber, CEO, "The new company name is the first step of a comprehensive market offensive. It will strengthen the position of the MWM in the growing market of the ecologically progressive energy solutions, and enable the company to embrace economical and technical challenges."

MWM can look back at a tradition of innovation which has lasted over 130 years. In 1871 car inventor Carl Benz started it all with the foundation of his "Mechanical Workshop" in Mannheim. Fifty one years later, in 1922, the company split up, and the Motoren-Werke Mannheim AG (formerly Benz) "Stationary Engine Construction" was launched. In 1985 Klöckner-Humboldt-Deutz AG took over MWM. Then in 2005, Deutz AG spun off a division known as DEUTZ Power Systems and sold it to the investment firm of 3i in 2007.

Today, MWM employs more than 1000 employees and operates ten subsidiaries worldwide, including China, Singapore, Australia and the United States. ■

Stay on Top of Your Game with EGSA's Electrical Generator Systems Technician Certification Program

Think things move pretty fast in today's business world? Think how fast they'll be moving one, five or even 10 years down the road. That's why you need every advantage to stay on top.

It's no secret that technology is becoming more complex—not less—and that makes today's On-Site Power Generation System a lot more expensive. End-users—your customers—don't want just anybody with a basic knowledge of mechanics to install and maintain their equipment. They want to be confident that all work has been performed by qualified personnel. Suppliers want assurance that skilled technicians are performing maintenance and repairs to guard against unnecessary returns or warranty repairs.

As Good as Your Word

In the past, your word was the only assurance that your technicians are skilled and knowledgeable. But now, through EGSA's Electrical Generator Systems Technician Certification Program, there is a way that you can back up those words with objective evidence of your technicians' proficiency.

EGSA offers you a big advantage: For the first time in our industry, we have an objective and accurate way to determine generator technician proficiency. That means that the same standards will be used to measure the skills and knowledge of technicians from Maine to Manitoba and Mexico. Yes, Manitoba and Mexico! EGSA has determined that there is no reason why the test could not be fairly applied to any NAFTA technician.

What are the Benefits?

For the Employer, certification helps ensure that your technicians have the critical knowledge and skills to succeed in their jobs. And everyone will be comfortable knowing that your certified techicians' expertise has been confirmed by *the* industry organization through a program that was developed by a university. Encouraging and helping your technicians become certified signifies your commitment to the highest of standards. Plus, it lends an added level of credibility to your firm and can sharpen your competitive edge. Employing certified techs will promote customer satisfaction and you won't have to be shy about offering assurance that your techs are qualified. Certification can also help you select potential new hires, analyze job performance, evaluate employees and motivate technicians to enhance their skills and knowledge.

Think about the message that certification sends to those with whom you do business. Why would anyone want a technician who isn't certified performing critical maintenance or repair tasks? Employing certified technicians gives you an added tool with which to market your business.

As our members have said, "We've seen too many backyard mechanics damage expensive equipment. This program will provide credibility for my company and will help build pride and a commitment from technicians to be the best."

For the Technician

Certificate holders benefit too. Certification shows employers, clients, and associates that you are committed as a professional. It provides recognition of your knowledge and skill, shows your commitment to your profession and can help with job advancement. Certification is a mark of excellence that you carry with you everywhere you go.

Acquiring certification indicates that you have the knowledge and proficiency required to perform as an Electrical Generating Systems Technician professional. Becoming certified can increase your salary, enhance your skills, and make your job more satisfying.

Certification helps ensure that your technicians have the critical knowledge and skills to succeed in their jobs.

The Certification Test

EGSA collaborated with Ferris State University to develop the certification test and program. Through a scientific process, our panel of technical experts identified 12 duty areas (such as "Basic Electricity") and 61 tasks (such as "demonstrate knowledge of AC electrical theory") within the duty areas. The duty areas and tasks were ranked and rated in terms of their relative importance, the frequency with which a task is performed, and skill level (i.e. Senior/Expert; Intermediate; and Entry Level.) All this data was combined to develop the certification test that was then statistically validated through a pilot test taken by generator technicians from across the United States.

Who can take the Test?

There are no pre-qualifications for taking the EGSA Certification test. We recommend three or four years of field experience before taking the test. Technicians who have had formal education in On-Site Power Generation (a degree or certificate from a technical school or community college) may need less field experience. Those who pass the test will have a comprehensive knowledge of basic electricity, the functions of a gen-set's mechanical and electrical components, the interactions and relationships among components and an understanding of various elements of the installation, service, maintenance, and repair of gen-sets and On-Site Power Generation Systems.

Certification Testing Covers:

- *Automatic Transfer Switches*
- *Communication & Documentation*
- *Engine Generator Instrumentation & Controls*
- *Multiple Generator Switchgear & Controls*
- *Troubleshooting System Problems*
- *Auxiliary Support Systems*
- *Basic Electricity*
- *Prime Movers*
- *Governors*
- *Voltage Regulators*
- *Generators/Alternators*

Use the Study Guide to Prepare!

Use of the program's Study Guide is an excellent way to help techs prepare for the test and should clearly indicate if they are ready to take (and pass) the certification exam. In addition to useful formula pages, the guide contains almost 200 multiple choice practice questions that cover all parts of the certification test. In addition to identifying the correct answer, the guide also indicates in most cases why a particular choice is correct and why the others are incorrect. The Guide also identifies resource material where techs can get additional or more in-depth information about a given topic.

Need more information? Visit *www.egsa.org* to find extensive and detailed information about the certification program. Or contact EGSA Director of Education George Rowley via e-mail at *g.rowley@egsa.org*.

Disclaimer of Liability

Certified status is an indication that an individual has completed a combination of defined education, experience or examination requirements. However, Certification is not a guarantee or assurance of the competence or ability of any particular individual. Further, given the rapid changes in the field, the Electrical Generating Systems Association cannot warrant that the Examination and other Certification materials will at all times reflect the most current state of the art.

The Electrical Generating Systems Association disclaims liability for any personal injury, property or other damages of any nature whatsoever, whether special, indirect, consequential or compensatory, directly or indirectly resulting from the Certification Program or the acts or omissions of any person who has been Certified by the Electrical Generating Systems Association. In conducting the Certification Program, including issuing Certifications, the Electrical Generating Systems Association is not undertaking to render professional or other services for or on behalf of any person or entity, nor is the Electrical Generating Systems Association undertaking to perform any duty owed by any person or entity to someone else. Anyone using the services of a person who has been Certified should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances.

Electrical Generating Systems Association
1650 S. Dixie Hwy, Suite 400 • Boca Raton FL 33432
561/750-5575 • Fax: 561/395-8557 • *www.egsa.org*

Sales Engineer

Ransome Cat, Caterpillar Dealer for PA, NJ and DE is seeking an experienced Sales Engineer for their Power Generation Sales Division. This position will influence end users, engineers and contractors to select Caterpillar as their source for power generation products and services. Responsibilities to include: Identifying new bids for future projects; Assisting with system design, application assistance, budget and project price quotations; Assist with submittals, track projects and provide support to Engineers and customers regarding projects. Must have five years engine sales/power generation application experience and a 4 year college degree is preferred. If you are interested in becoming a part of our team, please e-mail resume to HR@ransome.com. Fax: 215-245-2914. www.ransome.com AA/EEO

SALES ENGINEER

KELLY GENERATOR & EQUIPMENT, INC., has an immediate opening for an Sales Engineer. We are located and operate in the mid-Atlantic region: Delaware, Maryland, NorthernVirginia, West Virginia and Washington, DC. The successful candidate will train, educate, and provide technical support to contractors and Electrical and Design Engineers for the company's products. Interface closely with engineering personnel to educate them about the company's innovative products such that Engineers adopt these products within their published specifications and work with a motivated outside sales team and inside sales support staff. B.S. in Mechanical or Power Engineering preferred. Strong presentation and effective communication skills for conducting presentations. Project management experience. Sales Experience a plus. Send resumes to: *dkelly@kge.com* or FAX 410-257-5227

Generator Field Technician

A fast growing Utah based standby power company has an opening for a full-time field technician to perform routine generator and transfer switch preventative maintenance, troubleshooting, repair work, and startups. Prior field experience in the generator standby power industry is required. Must have a good driving record, be clean cut, and be drug free. Competitive wage, benefits, company cell, and company truck are available for a qualified individual. Please fax resume to 801-544-7010.

EMERGENCY POWER SYSTEM SPECIALISTS

Generator Technician—Experienced

Emergency Systems Service Company in Quakertown, PA, a leading provider of emergency generator sets, has an immediate opening for a technician with a minimum of three years diesel engine/generator set background/experience. Responsibilities will involve troubleshooting, repair and the planned maintenance services of generator sets and peripheral equipment. A neat appearance, clean driving record and good people skills are required. We offer a highly attractive compensation with an outstanding benefits package. A company vehicle and additional training provided. If you are interested in becoming part of our team, please call **(215) 536-4973, ext. 25.**

Generator Technician–Apprentice

Emergency Systems Service Company in Quakertown, PA, a leading provider of emergency generator sets, has an immediate opening for a person with a strong mechanical/electrical background interested in a career in the power generation service field. Responsibilities will involve minor troubleshooting, repair and the planned maintenance services of generator sets and peripheral equipment. A neat appearance, clean driving record and good people skills are required. An outstanding benefits package, company vehicle and additional training provided. If you are interested in becoming part of our team, please call **(215) 536-4973, ext. 25.**

Generator Field Technician

KELLY GENERATOR & EQUIPMENT, INC., has an immediate opening for a Generator Technician. We are located and operate in the mid-Atlantic region: Delaware, Maryland, Virginia, West Virginia and Washington, DC. Must have a High School Diploma (Vocational or GED), a minimum of 3-5 years experience servicing industrial generator sets and associated equipment. Must be able to service, repair and troubleshoot the engine, as well as the alternator end of the equipment. Begin work with little or no supervision. MILITARY A PLUS! We offer factory training on the lines we represent as well as "in house" training. Full benefits include a company vehicle, medical, dental, vision 401(k) and profit sharing. FAX resumes to 410-257-5227 or e-mail to *contactus@kge.com.*

Power Generation Field Service Manager

Ransome Cat, Caterpillar Dealer for PA, NJ and DE is seeking an experienced EPG/Commercial Marine Field Service Manager for South Jersey. Responsibilities include scheduling and dispatching technicians to perform daily service/repairs. Responsible for the parts and service operation including: planning, developing, and organizing workforce to meet projected sales volume, required profit, and customer satisfaction. Previous EPG or Marine experience required. Electrical or Mechanical Engineering Degree preferred. If you are interested in becoming a part of our team, please e-mail resume to *HR@ransome.com*. Fax: 215-245-2914. www.ransome.com AA/EEO

Technical Services & Product Manager

Shindaiwa Construction Products, Oregon-based manufacturer of kWiet Power mobile generators has an opening for a Technical Services & Products Manager. We are seeking a well-qualified individual with technical and product support experience with **prime power mobile generators**. For a complete job descriptions, visit *www.shindaiwa.com*.

Generator Field Technician

PM Technologies, LLC has several immediate openings for Generator Technicians. We are located and operate in Michigan, Ohio and Northern Indiana. High School diploma or equivalent a must. Military experience a plus. Must be able to troubleshoot and repair the engine (diesel and gaseous) as well as the generator end. Customer interaction will be required on a daily basis. We need highly motivated, self sufficient people to assist in growing our expansion efforts at new branch locations. Benefits include company vehicle, 401k, health, dental and vision coverage's as well as paid bonuses for new account procurment. Please Fax resumes to 248.374.6408 or email to *dpopp@pmtech.org*

Generator Set Sales/Service

Experienced sales/service engineer needed by southern California company to sell engine generator sets.
Please respond to *J.Kellough@EGSA.org*
(Reference PLND06JB-1).

EGSA Job Bank Guidelines—EGSA will advertise (free of charge) EGSA Member company job openings in the Job Bank. **Free use of the Job Bank is strictly limited to companies advertising for positions available within their own firms. Companies who are not members of EGSA and third-party employment service firms who service our industry may utilize the Job Bank for a $300 fee**. Blind box ads using the EGSA Job Bank address are available upon request; company logos may be included for an additional fee. EGSA reserves the right to refuse any advertisement it deems inappropriate to the publication. Please send your classified ad (limited to about 50 words) to: EGSA Job Bank, 1650 S. Dixie Hwy, Suite 400, Boca Raton, FL 33432. Or, send it via e-mail it to: *J.Kellough@EGSA.org*

Engineer

Ransome Cat, Caterpillar Dealer for PA, NJ and DE is seeking an experienced Engineer for our Power Generation Division. Responsible for making certain electric power generation equipment/related systems are designed, manufactured, installed, tested, commissioned and handed over to the end user. Provide guidance to installation contractors, verify all electrical systems meet design specifications and identify deficiencies. Provide engineering guidance to Marine & Industrial Engine groups to ensure correct installations in OEM equipment. Bachelor's Degree in Engineering with min. 10 yrs experience within power generation/engine industry. Understanding of electric power systems market place and comprehensive knowledge of mechanical, electrical engineering disciplines, diesel and natural gas engine operations as well as electric power generation, distribution, equipment control systems. If you are interested in becoming a part of our team, please e-mail resume to *HR@ransome.com*. Fax: 215-245-2914. www.ransome.com AA/EEO

Generator Service Technician

Generator/Energy Systems Distributor, Service and Installation Company has an immediate opening for a technician with advanced knowledge of standby generator systems, including auto-switchgear, diesel and gas fueled engines. Candidate must be knowledgeable in 12 & 24 VDC controls, to include troubleshooting and repair. Pay commensurate with experience. Please forward resumes to *J.Kellough@EGSA.org* (Reference PLND08JB-9).

Power Systems/Service Sales

Johnson & Towers, Inc. South Jersey/Philadelphia/Delaware to acquire new service accounts for generators and power system installations. Power Systems experience preferred. Excellent salary and benefits for the right person. EOE. Fax resume to 410-687-4743 or email *rdiem@johnsontowers.com*.

Alban Engine Power Systems

Success has caused a huge expansion; we are currently hiring for the following positions:

Project Manager-Sales Operation
Field Service Tech-EPG
Switchgear UPS Tech
EPG Compact Generator Sales

Alban is the regional Caterpillar dealer for Maryland, North Virginia, West Virginia and Southern Delaware. Please contact Mary Ellen Dyer at 410-780-7240, via email at mdyer@albancat.com or via fax at 410-574-3190.

Generator Service Manager

Due to company expansion, an established generator repair company in Florida is searching for an experienced Service Manager in the Ft. Lauderdale, FL area. Will provide leadership, technical assistance, & schedule & train technicians. Must possess working knowledge & ability to inspect service & repair generator equipment. Salary & commission. DFWP. AA/EOE. Please respond via email to *J.Kellough@EGSA.org* (Reference PLND08JB-2).

Industrial Switchgear Product Specialist

TAW® Custom Equipment is currently seeking an experienced Industrial Switchgear Product Specialist for our Switchgear Division at our Custom Equipment facility in Riverview, FL. Founded in 1921, TAW® has grown to become one of the largest rotating equipment repair houses in the country. Our corporate headquarters are located in Riverview, FL and currently have 14 locations throughout FL & GA. For more information please visit our website at *www.tawce.com*. The Switchgear Product Specialist is responsible for increasing sales of industrial switchgear and power equipment centers – both low and medium voltage product lines with new and existing accounts. Will target utilities; OEM's and municipalities to drive volume. Prior experience either selling or application engineering of industrial switchgear systems, industrial switchgear experience in either medium or low voltage switchgear is required. Prior experience working for a manufacture or re-seller of industrial switchgear – medium or low voltage in either an engineering; applications; or sales role, or selling engineering systems for municipal, utility or mining applications preferred. TAW® offers a competitive salary depending on experience and an exceptional benefits package. E-mail resumes to *ellen.donegan@tawinc.com*. AA/EOE. DFWP. Check out our website *www.tawinc.com*

New EGSA Members

MF=Manufacturer DD=Distributor/Dealer CI=Contractor/Integrator MR=Manufacturers Rep
EM=Energy Management Co. AA=Trade Publication AB=Trade Association AC=Engineer
AD=End-User AE=Service AG=Educational Institution AR=Retiree AF=Student

DSG Canada. . . . . (DD)
Saskatoon SK, Canada
(306) 242-7644 Fax: (306) 242-5457
Contact: Percy Hoff, President
Business: Distributor for SDMO and Baldor Generators

Echo Group Inc. . . . . (DD)
Beatrice, NE
(402) 520-1885
Contact: Jeremy Dean Engelman, Division Manager
Business: Echo Group Generators Division handles generators from: Generac, Winco, Winpower, Tiger/Power, Honda, Taylor Power Systems, and Yamaha. We provide sales, service, warranty and maintenance packages for the above units. We service Iowa, Nebraska and portions of Missouri, Kansas, South Dakota and Minnesota with 20 locations.

Ed Labor. . . . . (AE)
Anna, TX
(903) 267-5083
Contact: Ed Labor, Training Manager
Business: Training manager for an OEM. I train customers concerning manufacturer specific products involving generators and transfer

Energy Recovery Systems LLC . . . . (CI)
Chicopee, MA
(413) 437-1333 Fax: (413) 534-4111
Contact: Steven Neveu, President
Business: Energy Recovery Systems LLC specializes in the recovery of energy from exhaust heat and other wasted energy sources. We provide complete turnkey systems to recover heat and generate power using organic rankine cycle (ORC) and steam rankine cycle technology. We serve the Northeastern US and focus on small scale projects.

General Power Limited . . . . (DD)
Doral, FL
Phone: (305) 471-9566 Fax: (305) 471-9568
Contact: Gabriel Lopez
Business: Distributor of diesel generators, alternators (generator ends), automatic transfer switches, automatic voltage regulators, engine and alternator spare parts and related equipment. Authorized distributor for SDMO, Kohler, Broadcrown, Stamford Newage, Leroy Somer, Marathon, and many more. Excellent prices and large stock from 5 up to 1000 kW generators.

Mastry Engine Center . . . . (DD)
St. Petersburg, FL
(727) 522-9471 Fax: (727) 381-3235
Contact: Stan Carlan, Ind. General Manager
Business: Distributor of diesel engines for Yanmar and others.

McDonald, Darren . . . .(AF)
Perth, Australia
(61) 404 975254
Contact: Darren McDonald
Business: Student majoring in Mechanical Engineering, aiming to follow a family tradition of going into the power generation industry. I have joined EGSA to increase my knowledge base of the industry.

Methane Power Inc.. . . . . (AD)
Wells, ME
(207) 646-6200 Fax: (207) 646-6203
Contact: Leo LeBlanc, Vice President Operations
Business: Landfill gas to energy developer. We build, own and operate power plants.

Metropolitan Community College. . . . . (AG)
Omaha, NE
(402) 763-5817 Fax: (402) 763-5901
Contact: Luke Klingbeil, Diesel Technology Instructor
Business: Full-service public community college providing high quality educational programs and services to people of all ages and educational backgrounds.

MotorWorks, LLC. . . . . (MF)
Mulberry, FL
(863) 425-6100 Fax: (863) 425-6101
Contact: Gene Pigg, Director of Sales
Business: Sales, service, engineering and installation of power generation equipment with a passion for putting electricity and power to use for our customers. MotorWorks is a premier provider of generation solutions.

MWM of America. . . . . (MF)
Norcross, GA
(770) 279-6730 Fax: (770) 279-6719
Contact: Ron Ford, President & CEO
Business: MWM is a manufacturer of large gas prime power generators. We specialize in efficiently operating on bio gas fuels. Also CHP applications, complete systems approach, value added service.

Oyetunju, Rilwan . . . .(AF)
Tallahassee, FL
(850) 566-1848
Contact: Rilwan Oyetunji
Business: Research assistant at Florida State University majoring in Chemical Engineering.

Sommers Motor Generator Sales Ltd. . . . . (DD)
Tavistock, ON Canada
(519) 655-2396 Fax: (519) 655-3176
Contact: Chris McGregor, General Manager
Business: Sommers is a distributor of high quality generator systems and accessories. Established in 1936, we have a dealer network across North America. We carry a large inventory of diesel, natural gas, propane portable, pto, generators as well as automatic and manual transfer switches and electric motors.

Steve Secrist . . . .(AF)
Newport News, VA
(757) 377-9599 Fax: (757) 269-0876
Contact: Steve Secrist
Business: Student attending Thomas-Nelson Community College in Newport News, VA. Anticipate graduating in June of 2009.

Sulzer . . . . (MF)
Portland, OR
(503) 205-3665 Fax: (503) 205-3748
Contact: Jeff Cole, Corporate Event Marketer
Business: Sulzer was founded in 1834 in Winterthur, Switzerland and is active in over 120 locations worldwide, providing pumping, turbo, coating, static mixing, heat exchange, and surfacing technologies and products.

skep•tic /'sceptik'/ {Brit. scep•tic} *n.*
1 person inclined to doubt accepted opinions

At Power Station we know you are skeptical about genset manufacturers claiming to be quality manufacturers. We also know why!

AKSA sets have the power to convert skeptics into believers. Our quality is even deeper than the heavy-grade steel of our enclosures or the quality brand names of our components. AKSA quality is about building great products and standing behind them.

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Toll Free: 1-888-979-7786
Email: sales@powerstationgenerators.com
www.powerstationgenerators.com

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STANDBY GENERATOR SERVICES

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